DALTON AND INGERSOLL.

Sanitary Specialties,

1889.

THE
ATHENÆUM
OF
PHILADELPHIA.

TD.CAT. Dalton & Ingersoll
1889

CHAS. wood
3-77
$50

A — 4 inch Cast Iron Foot Vent.

B — Trap Chamber.

C — 6 inch Extra Heavy Cast Iron Sewer Trap.

D — Grease Trap.

E — 6 inch Extra Heavy Cast Iron Drain Pipe.

F — Barrett Cleanout.

G — 3 inch Extra Heavy Cast Iron Waste Pipe.

I — 5 inch Extra Heavy Cast Iron Soil Pipe.

J — 3 inch Extra Heavy Iron Back Air Pipe.

K — 5 inch Extra Heavy Iron Back Air Pipe.

L — 2 inch Lead Back Air Pipe.

M — 1½ inch Lead Back Air Pipe.

N — 2 inch Galvanized Spiral Ventilating Pipe.

O — 3 inch Galvanized Spiral Ventilating Pipe.

P — 3 inch Wrought Iron Ventilating Pipe.

Q — 2 inch Lead Waste Pipe.

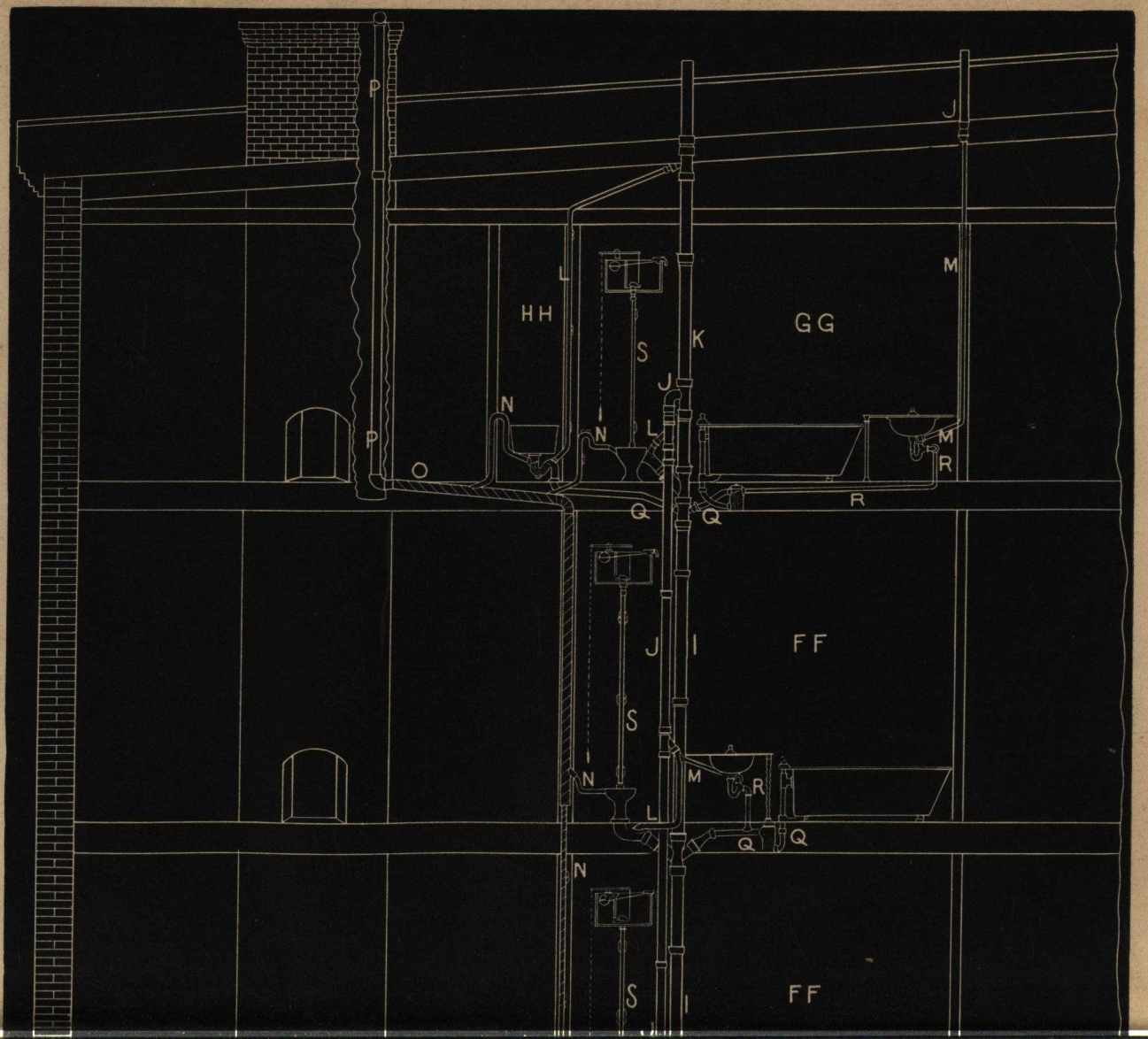
R — 1½ inch Lead Waste Pipe.

S — 1¼ inch Lead Flush Pipe.

AA — Kitchen.

BB — Servants' Closets, with Dalton & Ingersoll Water Closet Apparatus, No. 11.

CC — Laundry.



CC — Laundry.

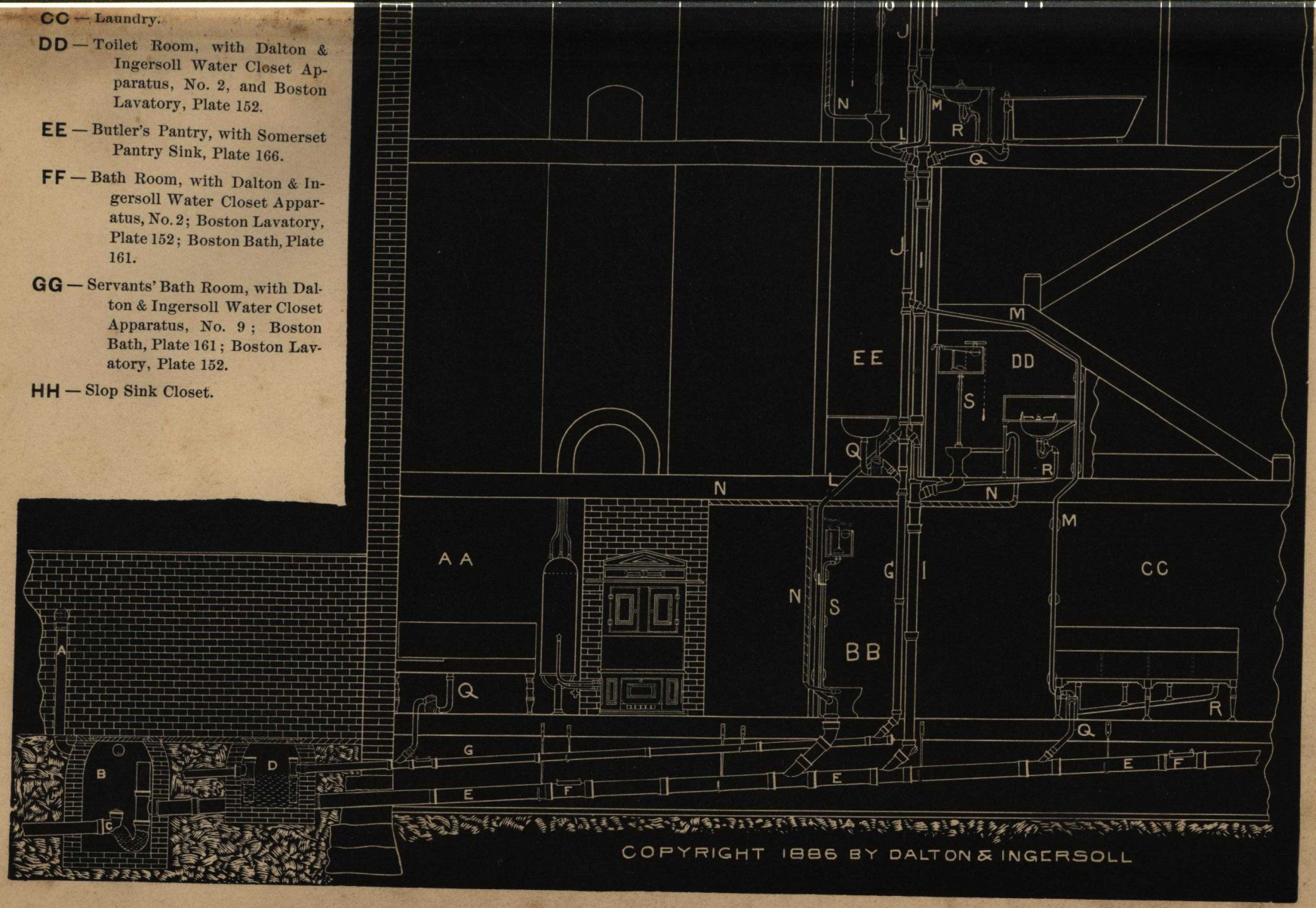
DD — Toilet Room, with Dalton & Ingersoll Water Closet Apparatus, No. 2, and Boston Lavatory, Plate 152.

EE — Butler's Pantry, with Somerset Pantry Sink, Plate 166.

FF — Bath Room, with Dalton & Ingersoll Water Closet Apparatus, No. 2; Boston Lavatory, Plate 152; Boston Bath, Plate 161.

GG — Servants' Bath Room, with Dalton & Ingersoll Water Closet Apparatus, No. 9; Boston Bath, Plate 161; Boston Lavatory, Plate 152.

HH — Slop Sink Closet.



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1889.

ILLUSTRATED CATALOGUE AND PRICE LIST.

DALTON & INGERSOLL,

171, 173, and 175 HIGH STREET (FORT HILL SQUARE),

55, 57, and 59 PURCHASE STREET,

BOSTON, MASS.

BRANCH OFFICE,
64 GOLD STREET,
NEW YORK.

NOTICE.

ARCHITECTS will find this Catalogue arranged in such a manner as to make it a very simple matter to specify our goods so that there can be no misunderstanding on the part of contractors as to what goods are wanted.

Plumbers and others in ordering will please order by the plate number.

Also keep in mind the following:—

What vents are wanted on closets, and whether right or left as you face the closet.

Whether Straight or Bent Couplings are wanted on Cistern.

Whether Finished Cisterns and Seats are wanted in Cherry, Ash, Walnut, Oak, or Mahogany.

All goods are carefully packed by an experienced packer, and are at the purchaser's risk after being receipted for.

Boxing and cartage charged at cost.

All claims for correction must be made within ten days after receipt of goods.

Return no goods without conferring with us.

Prices subject to change without notice.

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TDCAT 1889
PAPV03B502

TO THE TRADE.

THE **Scott Improved Float Valve,** the lever for giving a single operation of the valve (an after-wash), the lever for giving a double operation of the valve (a preliminary and an after-wash), the **Door Attachment, the Boston Siphon Closets, the Boston Hopper, Improved Floor Flanges, Somerset Bowl Fixtures, Somerset Traps, Boston Lavatory and Siphon Urinal,** all as herein illustrated and catalogued, are the invention of WILLIAM SCOTT, and are his and our sole property, as exclusive licensees under him.

All infringement of his and our rights as the exclusive licensees will be prosecuted; and all purchasers from us of any of the above-mentioned articles will be protected by us.

DALTON & INGERSOLL.

BOSTON, Jan. 1, 1889.

PREFACE.

In presenting this catalogue to Architects and the Trade and those interested in sanitary appliances, we more particularly desire to call your attention to the improvements we have made in our Sanitary Specialties since our last edition.

The first of these which we would call attention to are our new **Boston Siphon Closets.** These closets have been tested by us under the worst possible conditions, and we have proved that they will work perfectly where almost all other closets fail. They are more noiseless in action, more simple in construction, and less expensive to fit up than any of the well-known closets of the day.

Another new closet is our **Boston Hopper.** This closet is a Short Hopper and trap in the pedestal form, having a large pool of water and a water-sealed joint between the earthenware and metal pipe.

Floor Flange Connections. — It is very well known that all earthen water closets that have all their traps above the floor make at their connection with the soil pipe a very doubtful joint. In fact, in most cases, there is no possible way of testing their tightness, and while they would not leak water, they still leak sewer air.

We have overcome this defect with our floor flange. Where our connection is fixed to the outlet of a water closet, it is not only protected from leakage of sewer air by the usual packing material, but it is also trapped by the water from the bowl, and if by any cause, such as imperfect fitting, etc., it should leak, it will first leak water, and so indicate the imperfect joint.

Our new **Boston Lavatory** is oval in form without recess or the usual plug or chain. The overflow is combined with the basin itself so as to allow its being readily cleansed. This is by far the best basin yet placed on the market.

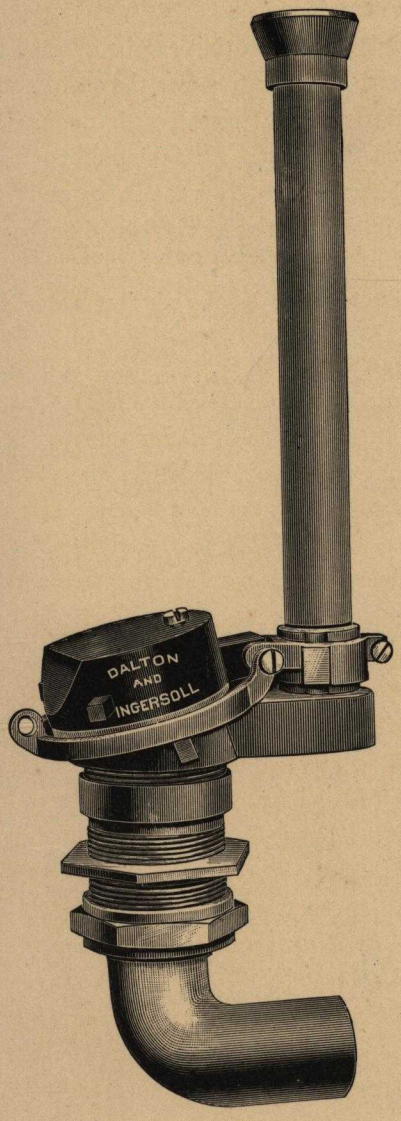
We have a **Siphon Urinal** constructed on the same principle as our **Siphon Closet,** holding a body of water, flushed by a tank giving an automatic action.

We would also say that we have entirely changed the construction of our **Universal Float Valve** which we have very much simplified, while still retaining the principle on which it worked, and the **Improved Float Valve** as now made (on the opinion of experts) is almost imperishable. It is also noiseless in action. We have also changed and simplified all our **Levers** for operating our valves, doing away entirely with the chain connection between the water-closet seat and the cistern lever, using instead a one-eighth gas-pipe, which, unlike the chain, will never stretch when once in position.

The above improvements, in conjunction with others of minor importance, make our cisterns the simplest, most durable, and easiest of operation that were ever devised.

We would also call your attention to our **Balance Ball Cock.** This cock will stand any city or town water-supply pressure, and where desired will be fitted to any of our cisterns. We also make a special and fine grade of **Compression Work** which is very much superior to regular goods. Also a line of **Self-closing Bibbs** which have no equal in the market.

The Scott Improved Float Valve.



It is well known that all water closets require a liberal supply of water to insure cleanliness and a proper flushing of the trap and soil-pipe; and it has been proved by experience that the public cannot be relied upon to properly cleanse a closet when supplied by a valve which leaves the quantity of water to be discharged discretionary with the user.

Therefore, as a guaranty to perfect cleanliness, it is necessary that all closets should be supplied by valves that are self-operating.

The Scott Improved Float Valve is a sure supply valve, possessing the following advantages over all other flushing appliances: —

It is universal in its applications, as it can be operated by a pull, seat, door, or any other known method, giving an automatic result in each case, and can be applied to any form of Hopper or Wash-out Closet.

It is more durable, having no parts that can be affected by grit or corrosion.

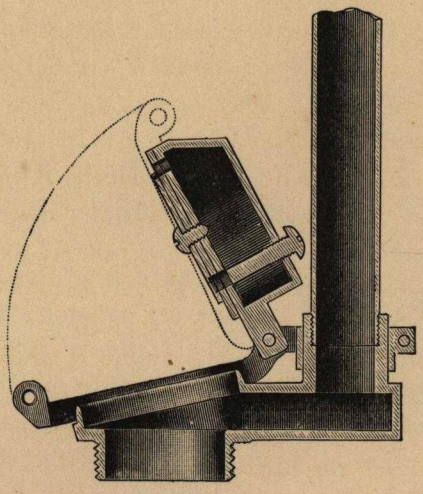
The construction, as shown in the cut, shows the seat on the incline with the valve hinged at one side. This construction dispenses with the usual guide spindle which is more or less liable to corrosion and causes a sticking of the valve. It does away with the necessity of having the lever directly over the valve, and yet have it work smooth and free. The float is made of the best vulcanized hard rubber and is absolutely imperishable in cold water.

These valves we guarantee to work in the dirtiest water and to give perfect satisfaction.

It is more positive and reliable in its operation, it having no sensitive parts, as springs, cup, leather, etc., to get out of order.

It is more effective, the water coming direct from the tanks and not from a supplementary chamber, as is usual with other appliances.

Action of Valve.



The action of the valve is as follows: —

When at rest upon its seat the float is full of air and when lifted a proper distance from its seat into a body of water it floats upon its hinged motion until it strikes the air-pipe of the valve.

This position brings the air passage in the bottom of the float above the level of the water passage, thereby causing a difference of pressure in favor of the latter. This difference causes the air contained in the float to be forced out through the upper (or air) passage by the water entering the float through the lower (or water) passage. When all the air has been discharged, the float will then have lost all its buoyancy and will sink to its seat, shutting off further discharge from the cistern. The seat of the valve being on an incline, again, causes a difference of level in the air and water passages which allows the air from the discharge pipe to flow into the float through the higher passage, discharging the water through the lower passage until the float is again filled with air and ready for another operation.

The length of time required for the float to discharge the water is about two seconds.

Improved Float Valve and Door Attachment.

For **Schoolhouses, Railroad Depots,** and other public places, where a great number of people have access to the water closets, this method of operating the closets is recognized as the most positive and effective. But the great difficulty has been where **Common Valves** are used; as the door is simply opened and at once closed with the aid of a spring, it gives no time for a proper flushing of the closet. And they are also objectionable if the door is held open too long: the water runs all the time causing a very serious waste.

The **Improved Float Valve** and **Door Attachment** overcomes these objections. The valve remains open long enough, whether the door is opened slow or fast, to give an assured flush at each movement of the door, the amount of water discharged being governed by the **Regulator** in the valve.

The door is connected with the valve only as it passes the **Striker,** thus preventing any waste of water, and, as no stop-chain is needed, admits of the door being thrown wide open if desired.

The attachments are very simple, offer no resistance to the movement of the door, and cannot be put out of gear.

No. 1, Copper-Lined Panelled Cistern.

No. 2, Door Fixtures.

BOSTON HOPPER and No. 6 SEAT.

Plate 1.

When arranging for these fixtures, the door should extend to top of door frame. For ventilation have door come within ten inches of the floor, or have panels made with blind slats.

No. 1, Door Attachment.

THE DOOR OPENING INTO WATER-CLOSET ROOM.

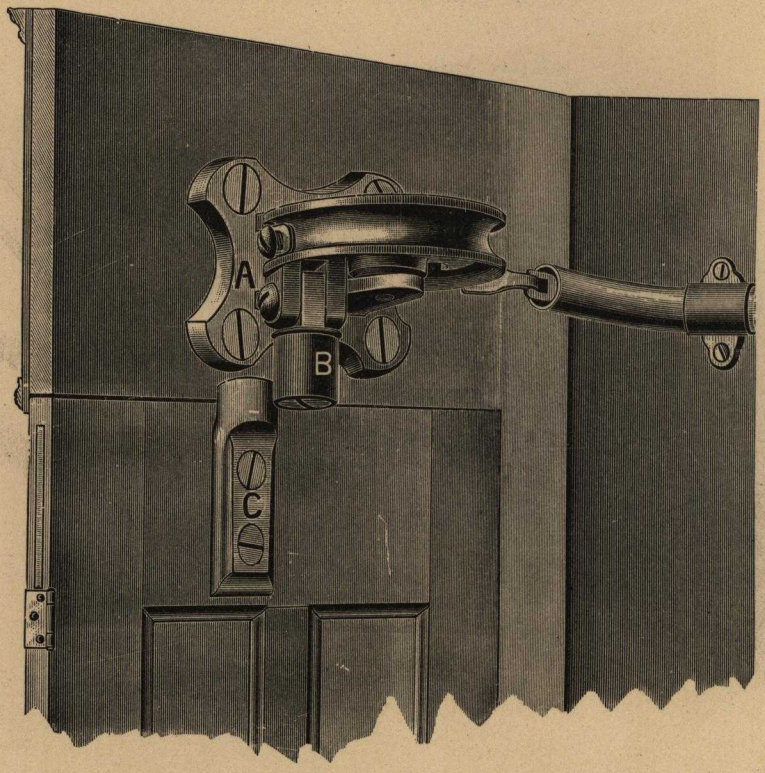


Plate 2.

Sold only in connection with our Cisterns.

Price per set, including 8 feet of chain $2.50

Brass tube furnished and bent to order on receipt of diagram of measurements.

DIRECTIONS FOR FITTING UP.

No. 1 Door Attachment is intended for a door opening into a water-closet room. Screw the plate of the operating wheel (A) on the door casing over the centre of the door; toe-piece (B) hanging downward, and on the side next to the opening of the door, and high enough to allow the door to swing without striking it. Screw the striker (C) on the door immediately behind the toe-piece (B), and high enough to collide with the toe-piece when the door is opened.

Instead of cranks and pulleys we would suggest that five-eighth inch brass tubing be used, to lead the chain from the door to the cistern, and where it is necessary, make long easy bends so that the chain will work freely. (See p. 9.) This not only takes the place of cranks and pulleys, but also serves as a protection to the chain from malicious persons.

The chain can lead either right or left as desired by reversing the operating wheel (A) and toe-piece (B). (Use a spring on the door to assist its closing.)

The chain in all cases must lead along the wall next the opening of the door.

No. 2, Door Attachment.

THE DOOR OPENING OUT FROM WATER-CLOSET ROOM.

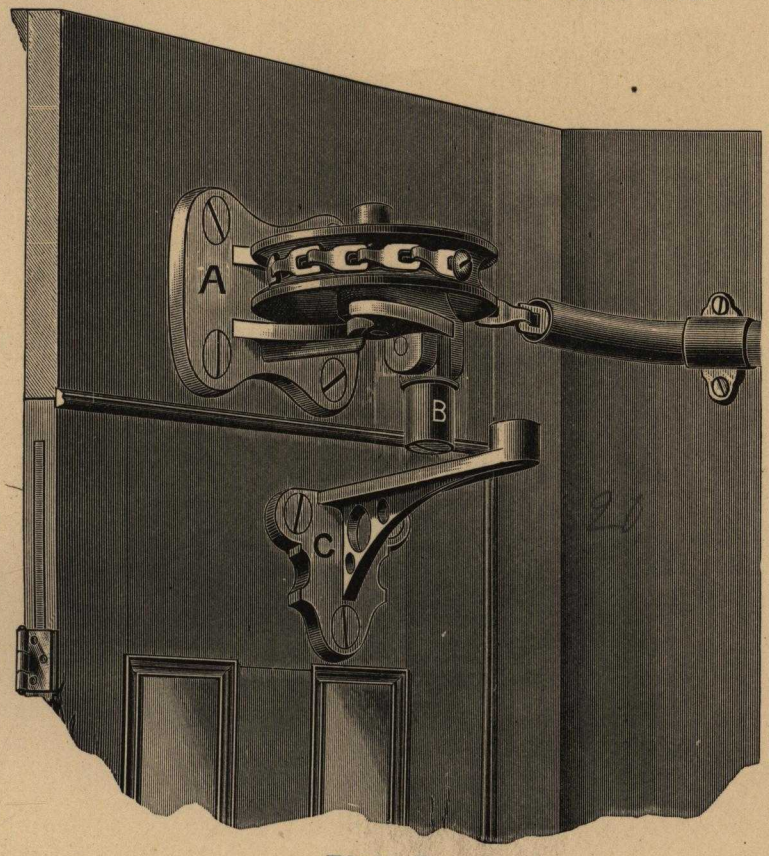


Plate 3.

Sold only in connection with our Cisterns.

Price per set, including 8 feet of chain $2.50

Brass tube furnished and bent to order on receipt of diagram and measurements.

DIRECTIONS FOR FITTING UP.

No. 2 Door Attachment is intended for a door opening out from a water-closet room. Screw the plate of the operating wheel (A) on the door casing over the centre of the door, the lower edge of the plate about flush with the door joint; toe-piece (B) hanging downward, and on the side next to the opening of the door. Screw the striker (C) on the door immediately under the centre of the toe-piece (B) and high enough to collide with the toe-piece (B) when the door is opened.

Instead of cranks or pulleys we would suggest that five-eighth inch brass tubing be used, to lead the chain from the door to the cistern, and where it is necessary, make long easy bends so that the chain will work freely. (See p. 9.) This not only takes the place of cranks and pulleys, but also serves as a protection to the chain from malicious persons.

The chain can lead either right or left as desired, by reversing the operating wheel (A) and toe-piece (B). (Use a spring on the door to assist its closing.)

The chain in all cases must run on the wall next to the opening of the door.

CAST IRON AND COPPER-LINED CISTERNS,

WITH

IMPROVED FLOAT VALVES and IMPROVED SWINGING VALVES.

BRASS SUPPLY and FLUSH PIPES,

FLOOR FLANGES and WATER-CLOSET SEATS.

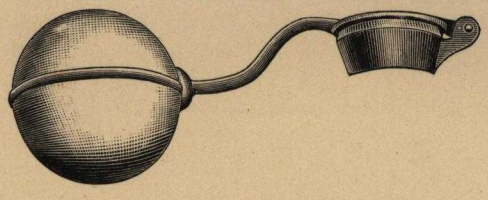
Sure-Supply Wood, Copper-Lined and Iron Cisterns.

WITH THE IMPROVED FLOAT VALVE.

These Cisterns are designed to supply **Flushing Rim Hoppers**; a simple pull of the chain discharging the required amount of water, without the necessity of holding it, thus insuring a perfect cleansing of the Hopper and Trap.

The amount of water to be discharged can be governed by the **Regulating Screw on top of the Float.**

These Cisterns can also be used in connection with our door fixtures, as shown in Plates 2 and 3.



Refilling Attachment.

The refilling attachment can be attached to the overflow of any of our cisterns and is only necessary where the cisterns are to be used over a wash-out closet. Its purpose is to check the flow of water after the valve has closed, permitting it to flow slowly, thus refilling the catch basin from which the water has been driven by the force of the flush.

No. 1, Copper-Lined Wood Cistern.

SURE SUPPLY.

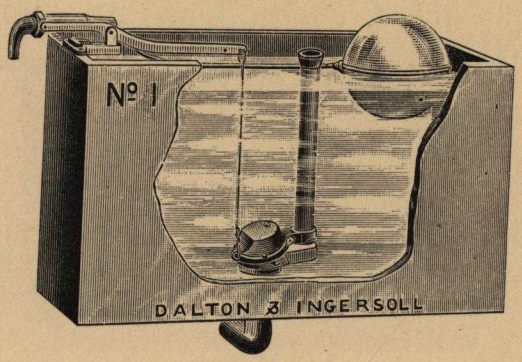


Plate 4.

Size, 22 × 13 × 13 inches inside measure. Capacity, 16 gallons.

Price $12.50

Add for refilling attachment for wash-out closets, each ..... .75

No. 5, Copper-Lined Wood Cistern.

SURE SUPPLY.

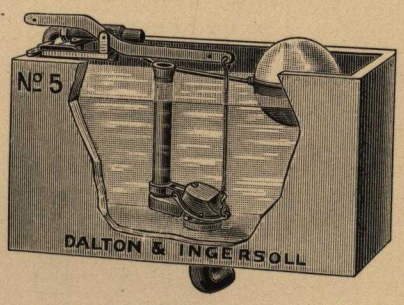


Plate 5.

Size, 19 × 10½ × 11 inches inside measure. Capacity, 10 gallons.

Price $11.50

Add for refilling attachment for wash-out closets, each ..... .75

These Cisterns finished in Walnut, Cherry, Ash, or Oak. (See page 33.)

No. 9, Iron Cistern.

SURE SUPPLY.

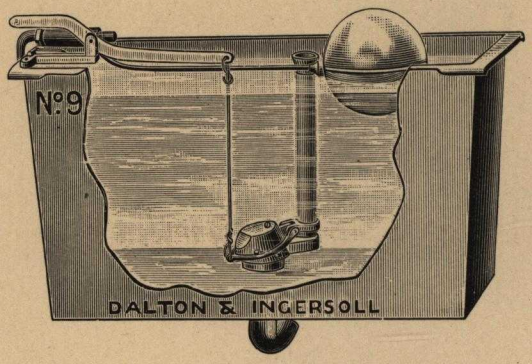


Plate 6.

Size, 22 × 12 × 12 inches inside measure. Capacity, 14 gallons.

Price	$10.00
Add for refilling attachment for wash-out closets, each	.75

No. 13, Iron Cistern.

SURE SUPPLY.

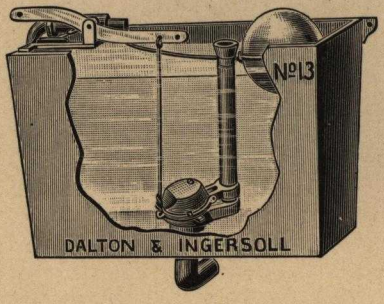


Plate 7.

Size, 18 × 18 × 12 inches inside measure. Capacity, 7½ gallons.

Price	$8.00
Add for refilling attachment for wash-out closets, each	.75

Waste-Preventing Copper-Lined and Iron Cisterns.

WITH IMPROVED FLOAT VALVES.

These Cisterns are worked by pull and chain, the valve being the same in every respect as in **Sure-Supply Cistern**, but operated by our Patent Waste-Preventing Lever.

We especially recommend this Cistern for use where there is a scarcity of water, or where water meters are used; as on pulling the chain, you simply put the lever in position to open the valve when the hold on the pull is released, no water being discharged until such action, and then only as much as the valve is regulated to supply, the quantity being governed by the regulating screw on the top of the float.

This is an excellent Cistern to use with wash-out closets, in connection with our refilling attachment. (See page 14.)

See page 7 for full description of the action of the valve.

No. 2, Copper-Lined Wood Cistern.

WASTE PREVENTING.

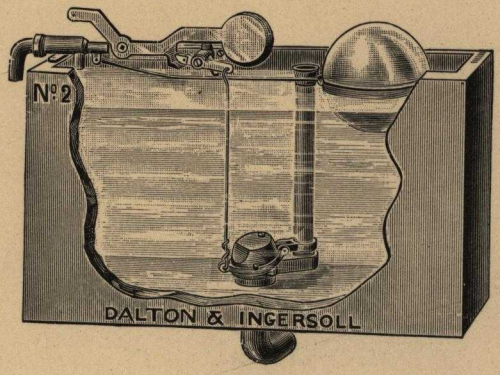


Plate 8.

Size, 22 × 13 × 13 inches inside measure. Capacity, 16 gallons.

Price $15.50
Add for refilling attachment for wash-out closets, each ..... .75

No. 6, Copper-Lined Wood Cistern.

WASTE PREVENTING.

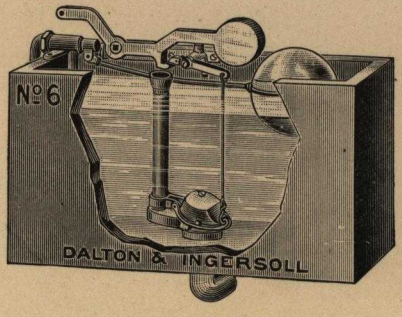


Plate 9.

Size, 19 × 10½ × 11 inches inside measure. Capacity, 10 gallons.

Price $14.50
Add for refilling attachment for wash-out closets, each ..... .75

These Cisterns finished in Walnut, Cherry, Ash, or Oak. (See page 33.)

No. 10, Iron Cistern.

WASTE PREVENTING.

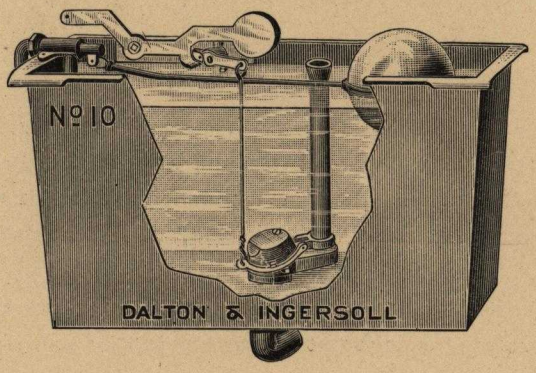


Plate 10.

Size, 22 × 12 × 12 inches inside measure. Capacity, 14 gallons.

Price	$13.00
Add for refilling attachment for wash-out closet, each	.75

No. 14, Iron Cistern.

WASTE PREVENTING.

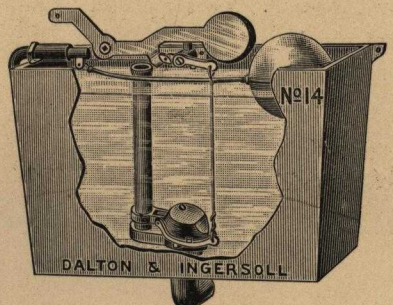


Plate 11.

Size, 18 × 8 × 12 inches inside measure. Capacity, 7½ gallons.

Price	$10.00
Add for refilling attachment for wash-out closet, each	.75

Copper-Lined and Iron Cisterns.

FORE AND AFTER WASH.

These Cisterns are the most perfect fore and after wash cisterns ever devised to work automatically. The valve is the same as in our other cisterns but operated with our double-acting lever, the action of which is simple, the two washes being obtained as follows: —

On depressing the seat the upward motion of the lever raises the valve a short distance from its seat, allowing enough water to escape to thoroughly wet all parts of the closet. When the seat is released, the valve is again opened by the reversed action of the lever, this time raising the float to its full height and leaving the float to drop as in our other cisterns, and discharging during this action one to three gallons. The quantity being governed by the regulating screw in the top of the float.

We wish to call particular attention to the small number of parts used in this fixture to produce the result as compared with fixtures of a similar nature made by other manufacturers; also to our new method of connecting the two levers, a length of $\frac{1}{8}$ inch pipe being used instead of the chain as is used by others. This makes a very substantial way of connecting. It overcomes the old objection of the chain stretching and requiring frequent adjustments to insure proper working of the valve.

These Cisterns are applicable to any style of closet known, but more especially to such as have a large dry surface exposed.

We would suggest as a proper seat to use with these Cisterns, our No. 4, Plate 34, supported on galvanized iron brackets. This method of supporting the seat we think much preferable to the one of the leg support.

Seat lever and fittings furnished with these Cisterns.

No. 3, Copper-Lined Wood Cistern.

FORE AND AFTER WASH.

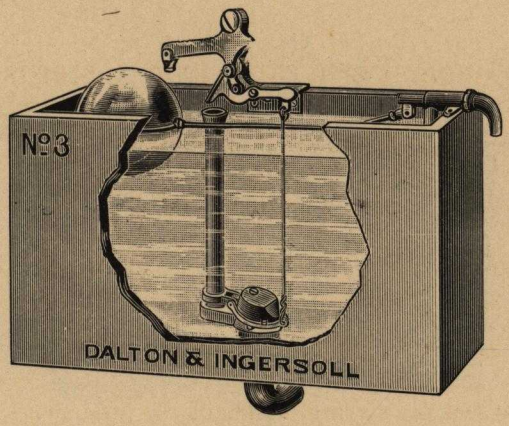


Plate 12.

Size, 22 × 13 × 13 inches inside measure. Capacity, 16 gallons.

Price, with Seat Lever only	$17.00
" with Galvanized Seat Brackets and Lever complete	19.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	24.50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	23.00

No. 7, Copper-Lined Wood Cistern.

FORE AND AFTER WASH.

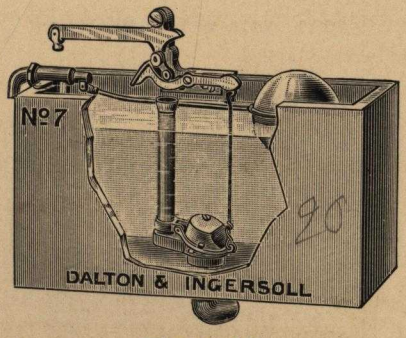


Plate 13.

Size, 19 × 10½ × 11 inches inside measure. Capacity, 10 gallons.

Price, with Seat Lever only	$16.00
" with Galvanized Seat Brackets and Lever complete	18.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	23.50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	22.00

In ordering, state whether Walnut, Cherry, Ash, or Oak Seats are desired. These Cisterns finished in Walnut, Cherry, Ash, or Oak. (See page 33.)

No. 11, Iron Cistern.

FORE AND AFTER WASH.

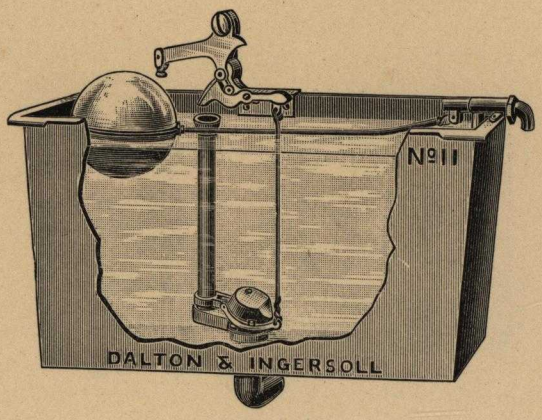


Plate 14.

Size, 22 × 12 × 12 inches inside measure. Capacity, 14 gallons.

Price,	with Seat Lever only	$15.00
"	with Galvanized Seat Brackets and Lever complete	17.50
"	with No. 4 Seat (Plate 34) with Brackets and Lever complete	22.50
"	with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	21.00

No. 15, Iron Cistern.

FORE AND AFTER WASH.

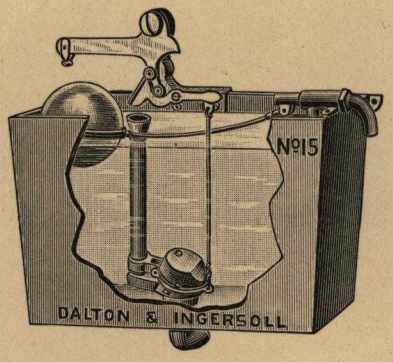


Plate 15.

Size, 18 × 18 × 12 inches inside measure. Capacity, 7½ gallons.

Price,	with Seat Lever only	$13.00
"	with Galvanized Seat Brackets and Lever complete	15.50
"	with No. 4 Seat (Plate 34) with Brackets and Lever complete	20.50
"	with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	19.00

Copper-Lined and Iron Cisterns.

AFTER WASH.

The Cisterns like our others are exceedingly simple. The valve is the same, the different result being obtained by a change in the construction of the lever. To produce this result the action is as follows: —

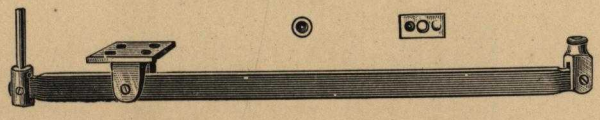
On depressing the seat the lever on the tank is raised into position to operate the valve when the seat is released, discharging only as much water as the valve is regulated to supply.

This will effectually prevent waste of water, as none can be discharged from the Cistern until the seat is released.

These tanks are especially adapted for use in connection with wash-out and siphon closets, where it is desirable to have an automatic apparatus.

We would suggest as a proper seat to use with these Cisterns, our No. 4, Plate 34, supported on galvanized iron brackets. This method of supporting the seat we think much preferable to the one of the leg support.

Seat lever and fittings furnished with these Cisterns.



No. 4, Copper-Lined Cistern.

AFTER WASH.

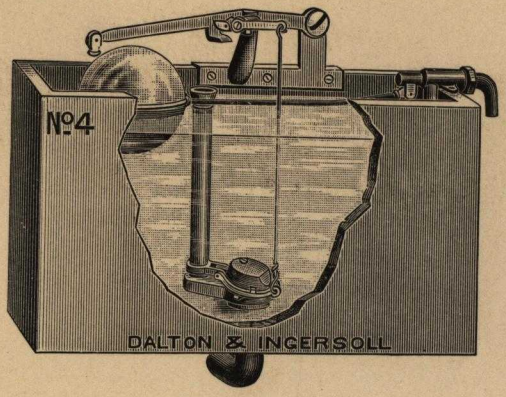


Plate 16.

Size, 22 × 13 × 13 inches inside measure. Capacity, 16 gallons.

Price, with Seat Lever only	$17.00
" with Galvanized Seat Brackets and Lever complete	19.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	24.50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	23.00

No. 8, Copper-Lined Cistern.

AFTER WASH.

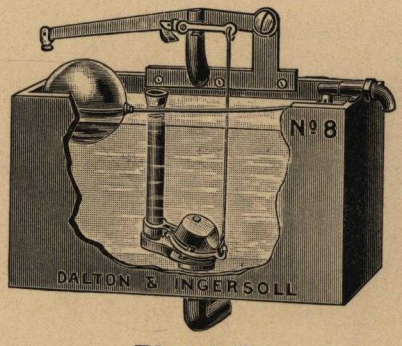


Plate 17.

Size, 19 × 10 × 11 inches inside measure. Capacity, 10 gallons.

Price, with Seat Lever only	$16.00
" with Galvanized Seat Brackets and Lever complete	18.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	23.50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	22.00

In ordering, state whether Walnut, Cherry, Ash, or Oak seats are desired.
These Cisterns finished in Walnut, Cherry, Ash, or Oak. (See page 33.)

No. 12, Iron Cistern.

AFTER WASH.

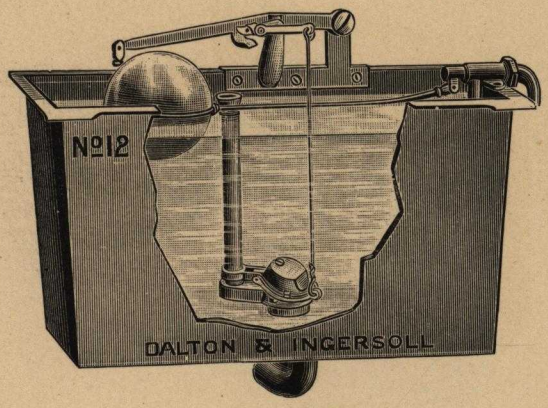


Plate 18.

Size, 22 × 12 × 12 inches inside measure. Capacity, 14 gallons.

Price, with Seat Lever only	$15.00
" with Galvanized Seat Brackets and Lever complete	17.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	22.50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	21.00

No. 16, Iron Cistern.

AFTER WASH.

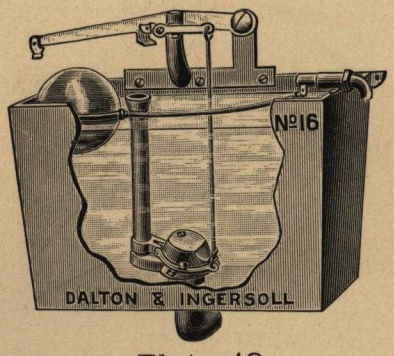


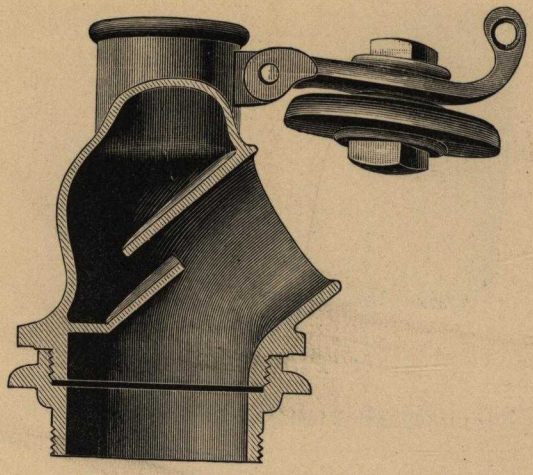
Plate 19.

Size, 18 × 18 × 12 inches inside measure. Capacity, 7½ gallons.

Price, with Seat Lever only	$13.00
" with Galvanized Seat Brackets and Lever complete	15.50
" with No. 4 Seat (Plate 34) with Brackets and Lever complete	20 50
" with No. 2 Seat (Plate 32) with 4 Legs and Lever complete	19.00

In ordering, state whether Walnut, Cherry, Ash, or Oak Seats are desired.

The Improved Swinging Cistern Valve.



[PATENTED JANUARY 26, 1886.]

A valve designed for flushing water closets, and a great improvement over the old form of tank valve, as well as those of more recent date, such as the side and centre air pipe valve.

In the construction of the valve we have made a radical departure from former methods, and gained many advantages not possessed by any valves now in use.

It is light but strongly made, simple but effective, will stand the roughest usage, and having no spindle or guides to become bent or corroded, will not get out of order.

Having no lead weight attached, it is opened easily and closes positively; the valve or clapper not having a rigid connection with the hinge, permits the suction to adjust it squarely to its seat.

As it can be operated from one point as well as another, a nice adjustment of the lever is not necessary, as is the case with other valves.

The overflow tube being stationary, the valve can be used in tanks of any depth by lengthening the tube with a piece of lead pipe.

It is perfectly noiseless, being so constructed that the sucking or gurgling noise, common to other valves, is entirely obviated.

It is pronounced by those who have used it, to be the best plain valve in the market.

Improved Swinging Valves.

VALVE WITH THIMBLE.

Plate 20.

Price, per dozen..... $15.00

VALVE WITH 1¼ INCH COUPLING.

Plate 21.

Price, per dozen $26.25

In ordering, state whether Bent or Straight Coupling is desired.

COPPER-LINED AND IRON CISTERNS,

WITH IMPROVED SWINGING VALVE.

For moderate cost Cisterns these have no superior in the market. They are simple, durable, and noiseless.

We should recommend their use where a low cost apparatus is necessary.

No. 17, Copper-Lined Cistern,

WITH IMPROVED SWINGING VALVE.

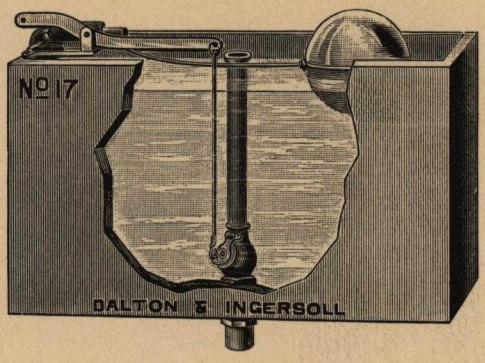


Plate 22.

Size, 22 × 13 × 13 inches inside measure. Capacity, 16 gallons.

Price $9.50

No. 18, Copper-Lined Cistern,

WITH IMPROVED SWINGING VALVE.

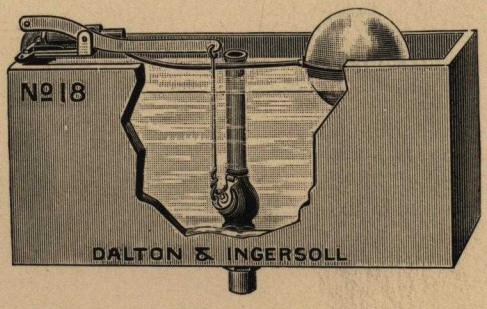


Plate 23.

Size, 22 × 10 × 11 inches inside measure. Capacity, 10½ gallons.

Price..... $8.00

No. 19, Copper-Lined Cistern,

WITH IMPROVED SWINGING VALVE.

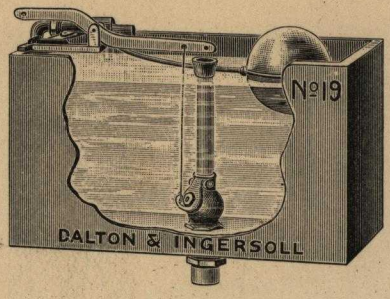


Plate 24.

Size, 19 × 8 × 11 inches inside measure. Capacity, 7½ gallons.

Price..... $7.50

No. 20, Iron Cistern,

WITH IMPROVED SWINGING VALVE.

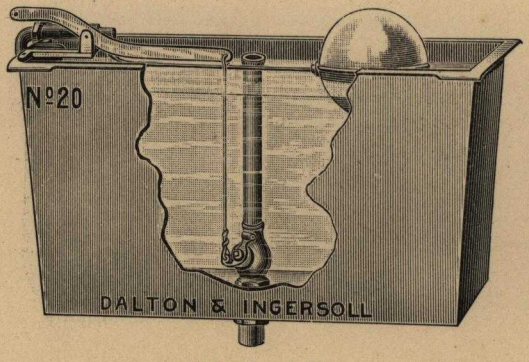


Plate 25.

Size, 22 × 12 × 12 inches inside measure. Capacity, 14 gallons.

Price..... $7.50

No. 21, Iron Cistern,

WITH IMPROVED SWINGING CISTERN VALVE.

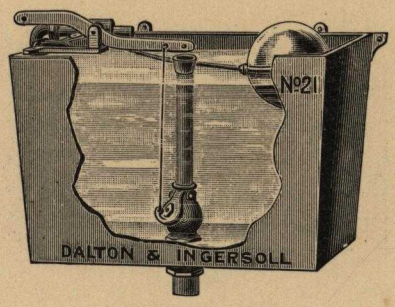


Plate 26.

Size, 18 × 8 × 12 inches inside measure. Capacity, 7½ gallons.

Price..... $5.63

No. 22, Copper-Lined Cistern,

WITH COMMON STAND-PIPE VALVE.

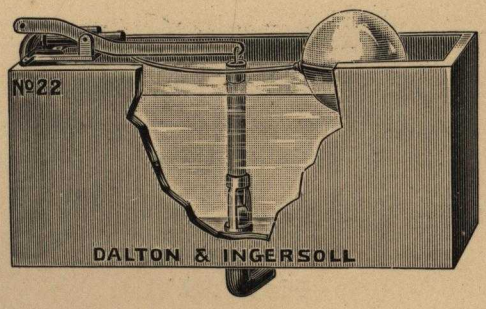


Plate 27.

Size, 22 × 10 × 11 inches inside measure. Capacity, 10½ gallons.

Price..... $7.00

No. 23, Copper-Lined Cistern,

WITH COMMON STAND-PIPE VALVE.

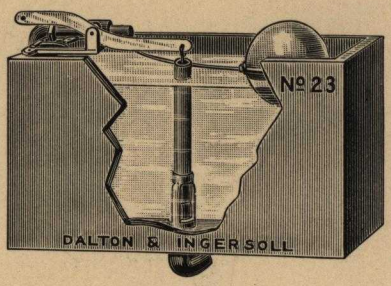


Plate 28.

Size, 19 × 8½ × 9 inches inside measure. Capacity, 6¼ gallons.

Price..... $5.50

No. 24, Iron Cistern,

WITH COMMON STAND-PIPE VALVE.

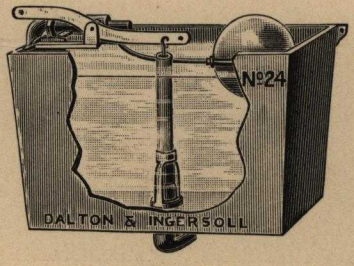


Plate 29.

Size, 16 × 7 × 8 inches inside measure. Capacity, 3¾ gallons.

Price..... $4.00

Cabinet-Finish Copper-Lined Cisterns.

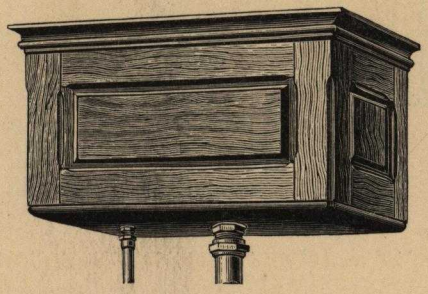


Plate 30.

No. A, size 22 × 13 × 13 inches inside measure.
No. B, size 19 × 10½ × 11 inches inside measure.

Price, Cherry, Ash, Walnut, or Oak, add to price of plain Copper-Lined Cisterns (Nos. 1 to 8 inclusive)	$7.25
" Mahogany, add	9.75

Our **Cabinet-Finish Copper-Lined Cisterns** are made of carefully selected stock and highly finished. They are more economical than the plain cistern finished by a carpenter, besides making a neater appearance.

They are furnished with a ball cock to supply through the bottom, and when put up with brass or nickel-plated supply and flush pipe, make a handsome finish to a bath-room, the expense being but a trifle beyond those put up with lead pipe.

These cisterns can be put up without the services of a carpenter or painter, which is quite an item of expense saved.

Closet Seats.

NO. 1 SEAT WITH PAINTED LEGS.

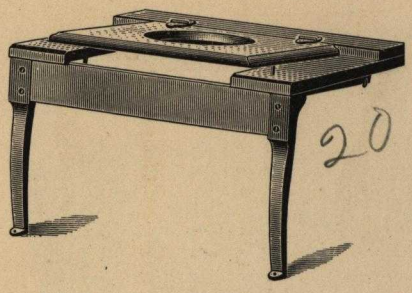


Plate 31.

Price, Cherry, Ash, or Walnut..... $5.00

The seat is adapted to places where the back part can be secured to the wall or partition, and can be used in connection with any of our closets or hoppers.

NO. 2 SEAT WITH GALVANIZED LEGS.

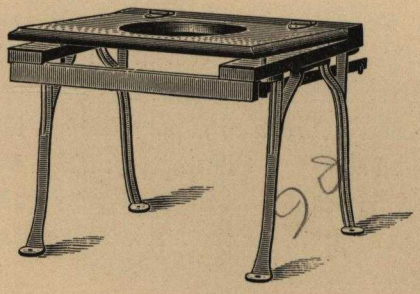


Plate 32.

Price, Cherry, Ash, or Walnut..... $6.25
If seats are desired with panelled cover, add to the above prices 2.00

This seat is intended for use where it is desirable to have the seat independent of the wall or partition, and can be used in connection with our closets or hoppers.

Closet Seats.

NO. 3 SEAT WITH ORNAMENTAL BRONZED LEGS.

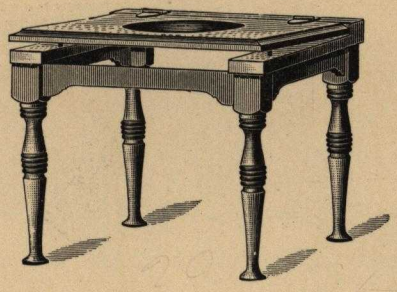


Plate 33.

Price, Cherry, Ash, or Walnut..... $10.00

These seats, like our No. 2, can be used in connection with any of our closets.

NO. 4 SEAT AND PANELLED BACK ON GALVANIZED BRACKETS.

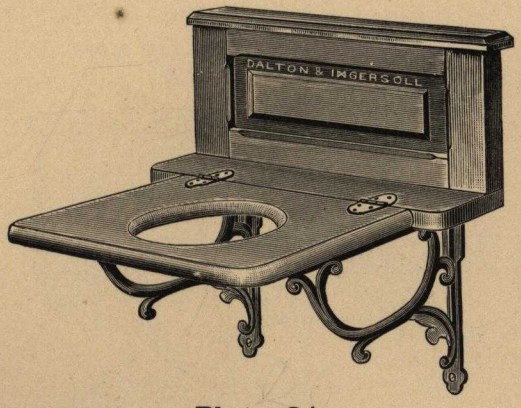


Plate 34.

Price, Cherry, Ash, or Walnut..... $7.75
If without panelled back, deduct..... 1.00

We recommend these seats for use over closets in preference to those with legs, as the space above the closet can be more easily cleaned.

Closet Seats.

NO. 5 SEAT AND PANELLED BACK.

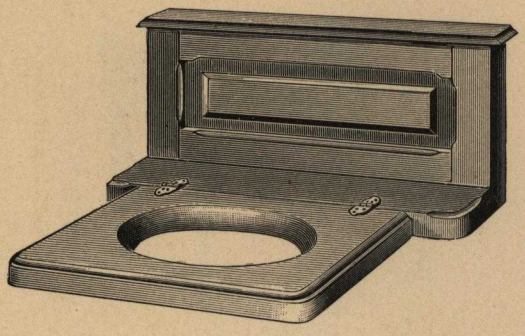


Plate 35.

Price, Cherry, Ash, Walnut, or Oak	$5.00
If with cover, add	2.00
If without panelled back, deduct	1.00

This seat is suitable for all square top wash-out or pedestal closets.

NO. 6 SEAT AND PANELLED BACK.

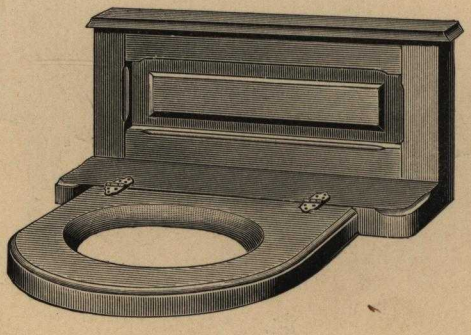


Plate 36.

Price, Cherry, Ash, Walnut, or Oak	$5.00
If with cover, add	2.00
If without panelled back, deduct	1.00

This seat is suitable for all oval top wash-out or pedestal closets.

Closet Seats.

NO. 7 SEAT WITH COVER AND PANELLED BACK.

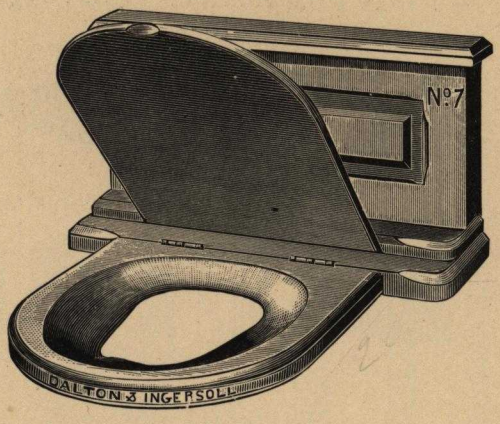


Plate 37.

Price, Cherry, Ash, Walnut, or Oak	$9.00
If without panelled back, deduct	1.00
Price, Mahogany	12.00
If without panelled back, deduct	1.50

This seat is suitable for our **Siphon Closets, Boston Hoppers** and **Wash-out Closets.**

NO. 8 SEAT WITH PANELLED BACK.

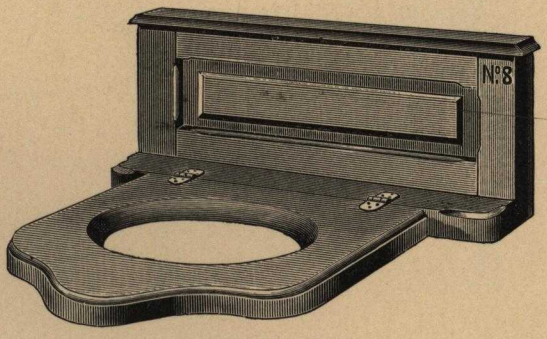


Plate 38.

Price, Cherry, Ash, Walnut, or Oak	$6.00
If with panelled cover, add	2.00
If without panelled back, deduct	1.00

This seat is suitable for the **Somerset Wash-out Closets.**

Closet Seats.

NO. 9 SEAT WITH POLISHED BRASS LEGS.

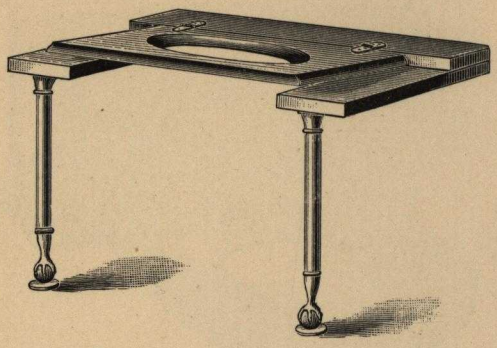


Plate 39.

Price, Cherry, Ash, Walnut, or Oak	$11.00
If with panelled cover, add	2.00
If legs are nickel-plated, add	1.50

NO. 10 SEAT WITH POLISHED BRASS LEGS.

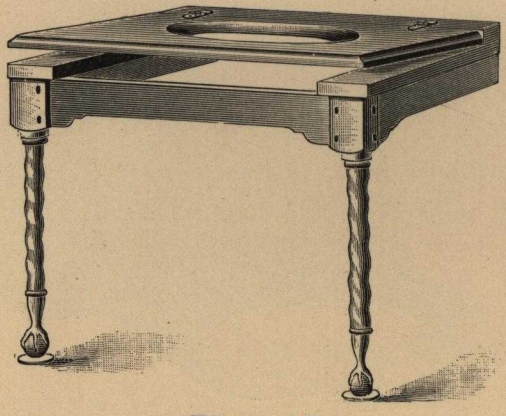


Plate 40.

Price, Cherry, Ash, Walnut, or Oak	$11.00
If with panelled cover, add	2.00
If legs are nickel-plated, add	1.50

These seats are suitable for any style of closet.

Polished Brass Legs

FOR WATER-CLOSET SEATS.

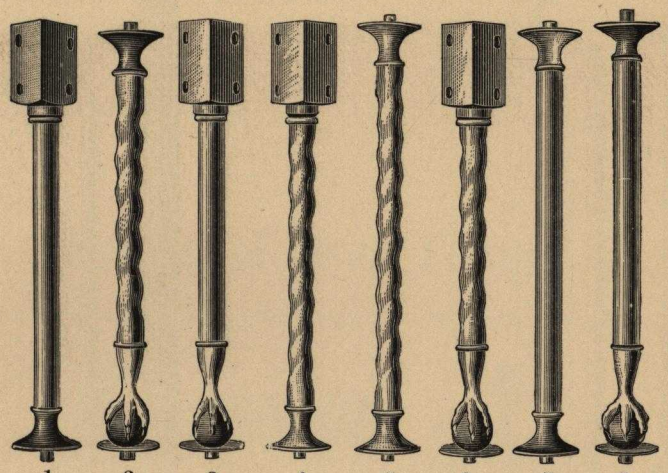


Plate 41.

Nos.	1	2	3	4	5	6	7	8
Price each, Brass.....	$3.00	$3.50	$3.00	$3.50	$3.50	$3.75	$2.50	$3.00
" " Nickel-Plated...	3.50	4.00	3.50	4.00	4.00	4.25	3.00	3.50

These legs are 15½ inches long. Other lengths made to order.

The Nos. 1, 3, 4, and 6, are intended for use on seats with risers, like Plate 40. Nos. 2, 5, 7, and 8, for seats without risers, like Plate 39.

Brass Supply and Flush Pipes.

NO. 1
FOR WASH-OUT CLOSETS AND HOPPERS.

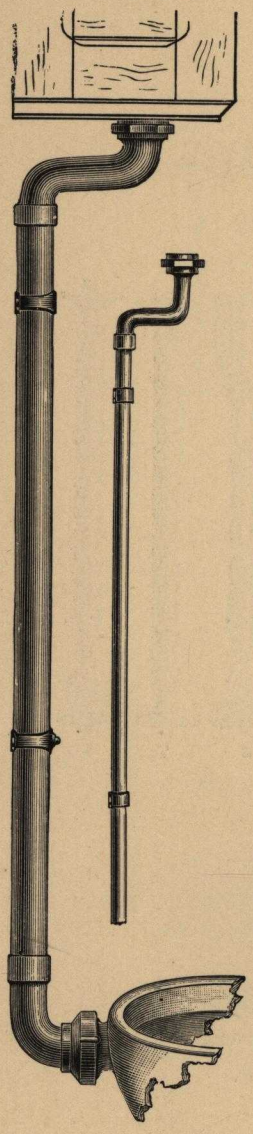


Plate 42.

Price per set, Polished Brass.... $10.00.
Add for Nickle-Plating ..... 2.50.

NO. 2
FOR BOSTON HOPPER AND SIPHON CLOSET.

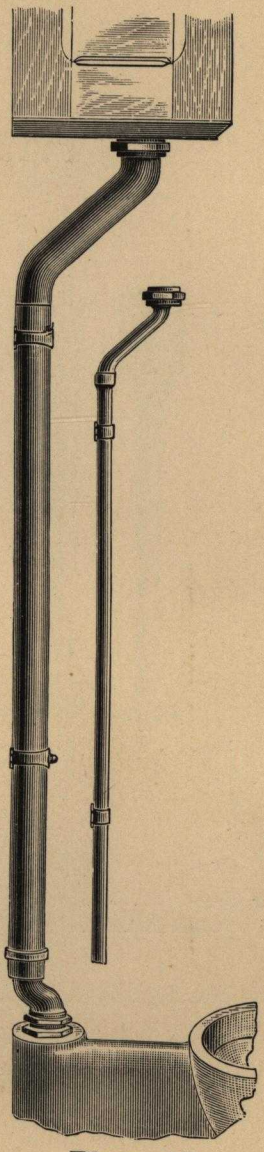


Plate 43.

Price per set, Polished Brass.... $12.50
Add for Nickel-Plating 2.50

If supply pipe and offset is not desired, deduct 3.00

The complete set of flush and supply pipe includes one $1\frac{1}{2}$ in. flush pipe, offset, slip coupling, and two clamps. One $\frac{5}{8}$ in. supply pipe, offset, and two clamps.

The flush pipe furnished is 5 ft. 6 in. long. The supply pipe 7 ft. These lengths will permit the cistern being set 7 ft. from the floor. If a less height is wanted, the plumber can cut off what is needed to make proper length.

Taking into consideration the saving of labor between fitting with brass and lead pipes, the cost of brass pipe supply and flush pipes is but a trifle more than that of lead.

Brass Floor Flange.

[PATENT APPLIED FOR.]

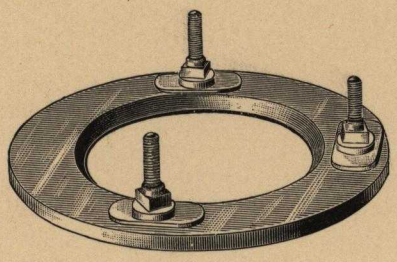


Plate 44.

Price, Polished Brass $2.00
If with Nickel-Plated Bolts and Nuts, add ..... .25

Section of Floor Flange,

SHOWING METHOD OF ATTACHING FLANGE TO LEAD BEND OR PIPE.

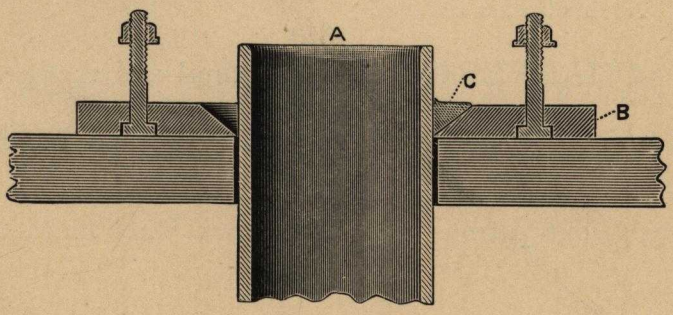


Plate 45.

DIRECTIONS FOR SETTING A CLOSET.

Let the end of the lead bend or pipe (A) stand $1\frac{1}{4}$ in. above the finished floor. Drop the brass flange (B) over it, and when the holes in the flange are in the proper position to receive the closet, solder it to the pipe; leaving the solder (C) flush with the top of the flange. For packing material, use red lead putty of good compressible consistency. Place a layer of this on top of the flange close around the walls of the pipe, and in sufficient quantity to fill the socket space in the outlet of the closet provided for the lead pipe which stands above the flange. Insert the brass bolts in the flange and set the closet on it. These directions, if followed, will insure a perfect joint which once hardened cannot be taken apart without the use of a chisel. If this joint is not properly made, the first time the closet is used it will show a leak of water either on the floor on which it sets or on the ceiling underneath it. Therefore it acts as a telltale of imperfect construction at its connection with the soil pipe.

The Cabinet Work illustrated on pages 33 to 38 is all made of selected stock, and particular attention is given to the finish.

Our Cisterns are finished in

CHERRY, Natural and Stained;

QUARTERED OAK, Natural and Antique;

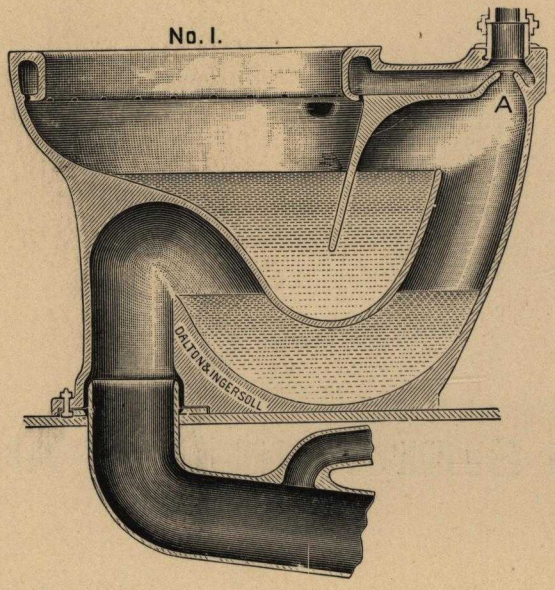
ASH, WALNUT, and **MAHOGANY.**

In ordering, our patrons will please state what finish is desired.

BOSTON SIPHON WATER-CLOSET APPARATUS.

BOSTON HOPPER-CLOSET APPARATUS.

Scott's Boston Siphon Closet.



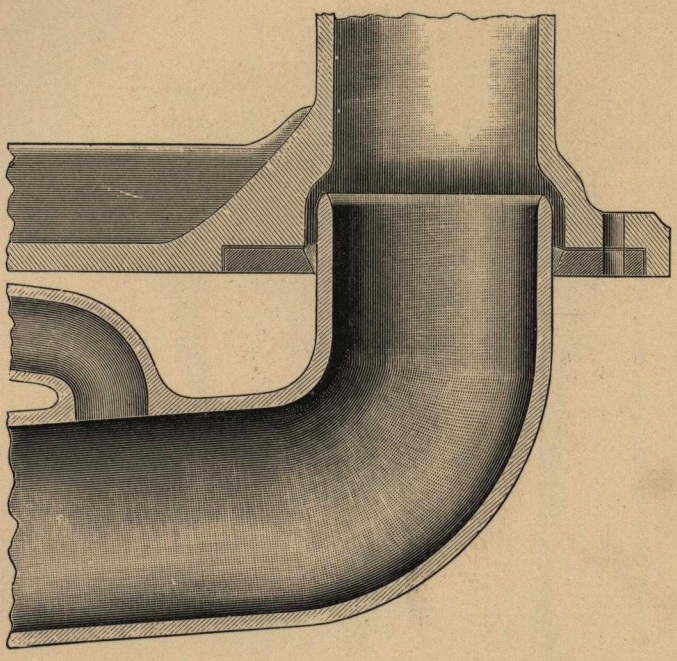
The above cut represents a sectional view of **The Boston Siphon Closet, No. 1.** The bowl contains a large body of water and the lower trap has the usual seal. The closet is all earthenware and of the best material. This closet at its outlet is provided with our Patent Floor Connection, and which we guarantee makes a positively tight connection between the earthenware and metal pipes.

The operation of the closet is as follows : —

When water is supplied to the closet, one-half of it goes through the jet (A) and forces the air that is between the two traps through the water of the lower trap, thus creating a partial vacuum and establishing a siphon which draws out the contents of the bowl. The other half of the water passes to the flushing rim, washing the bowl and assisting to discharge its contents. By dividing the stream of water, in this way we not only siphon the closet but we prevent the objectionable spattering which is present in closet bowls when all the water is discharged directly into the bowl, and at the same time we produce a more forcible expulsion of water through the lower trap, absolutely preventing the possibility of anything remaining in the trap after the closet has ceased to siphon. The refill to the bowl comes from a small service box in the bottom of the tank.

This closet is almost noiseless in its action, and the valve which supplies it is automatic, insuring a positive flushing of the closet at the slightest pull. The **Floor Flange** on this closet shows the lead connection of the soil pipe running up through it and into the discharge end of the closet one inch. This construction not only gives you

the packing between the flanges, but also up into and around and between the lead pipe and the earthen walls, and if the packing substance fails to press up the entire length of the socket space, the balance will be filled with water coming from the bowl, which will form a trap around the joint, making it absolutely tight.



NOTE.

We have not fitted this closet with a trap vent, as we consider it spoils its appearance; and we would suggest to vent the lead connection immediately under the floor as it leaves the closet, as shown in cut.

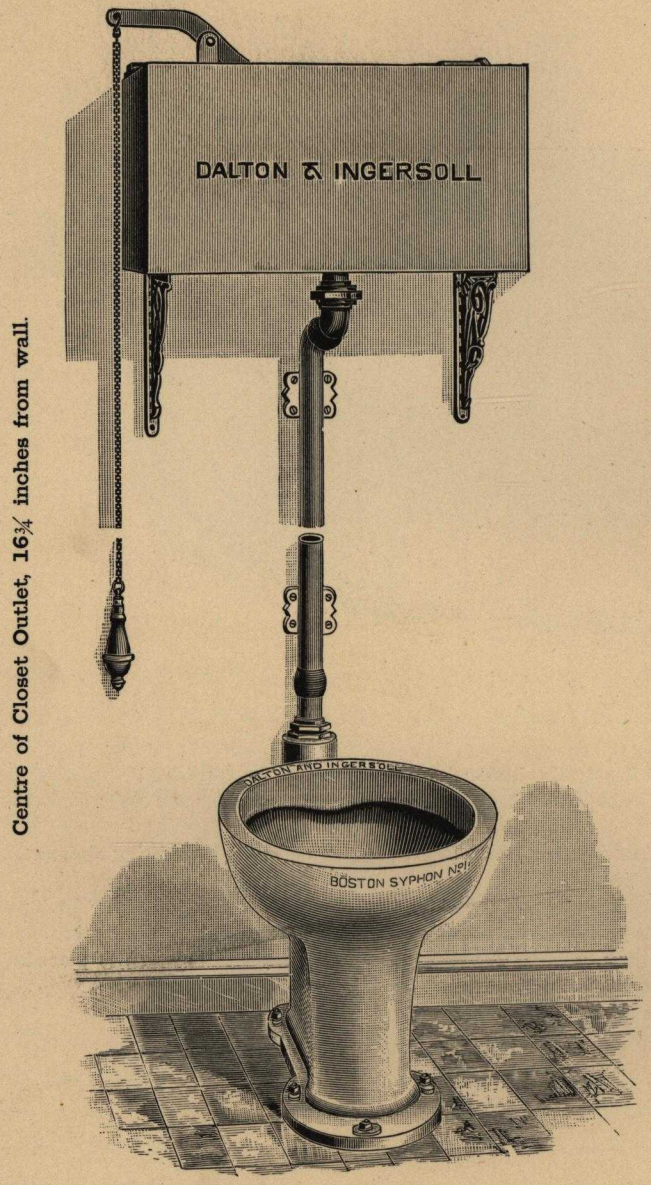
This method of venting is as effectual in preventing it from being siphoned as if it were connected with the earthen trap.

This closet will work with any elevation of cistern, but requires the flush pipe to lead straight down to the closet without bends or offsets, except the one under the cistern, as shown in cut, and that to lead only back to the wall against which the closet and cistern is placed. These conditions are absolutely necessary for the perfect working of the closet.

Size of flush pipe to be used, lead pipe, $1\frac{1}{4}$ in.; brass tubing, $1\frac{1}{2}$ in.

No. 1, Boston Siphon Water Closet.

OPERATED BY PULL AND CHAIN.



Centre of Closet Outlet, 16¾ inches from wall.

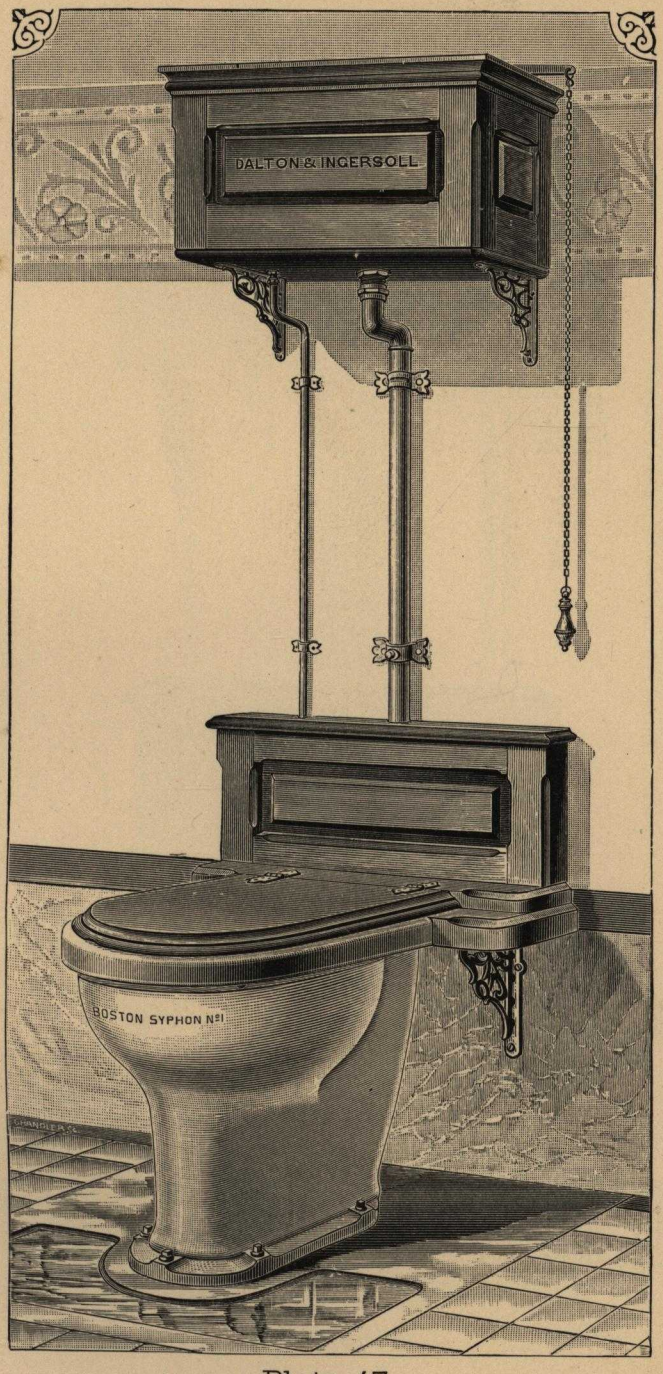
Plate 46.

The No. 1 Boston Siphon Water Closet with No. 1 Sure-Supply Copper-Lined Cistern, Brackets, and brass floor connection. For description of Closet, see page 44. For description of Cistern, see page 14. For price, see page 50. If seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 1.

No. 1, Boston Siphon Water Closet.

OPERATED BY PULL AND CHAIN.



Centre of Closet Outlet, 16¾ inches from wall.

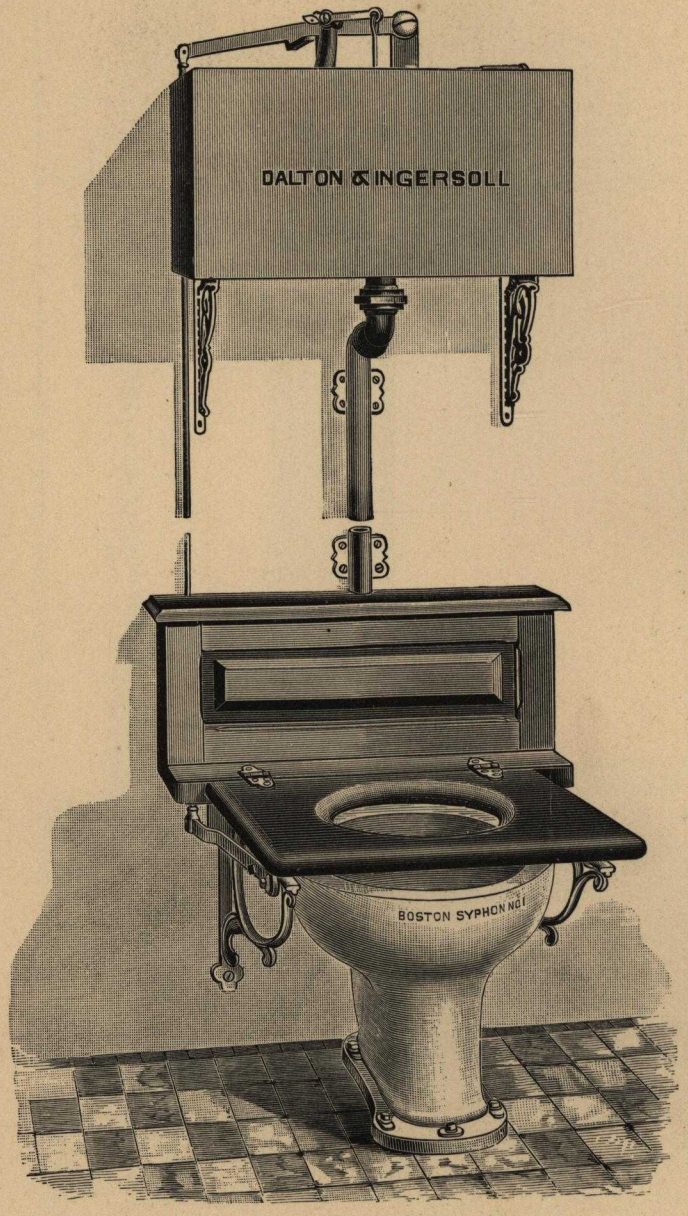
Plate 47.

The No. 1 Boston Siphon Water Closet, with No. 1 Sure-Supply Copper-Lined Panelled Cistern and Brackets, No. 7 Seat and Brackets, Polished Brass Supply and Flush Pipes, and brass floor connection. Cisterns and Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 44. For description of Cistern, see page 14. For price, see page 50.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 2.

No. 1, Boston Siphon Water Closet.

OPERATED BY SEAT.



Centre of Closet Outlet, 16¾ inches from wall.

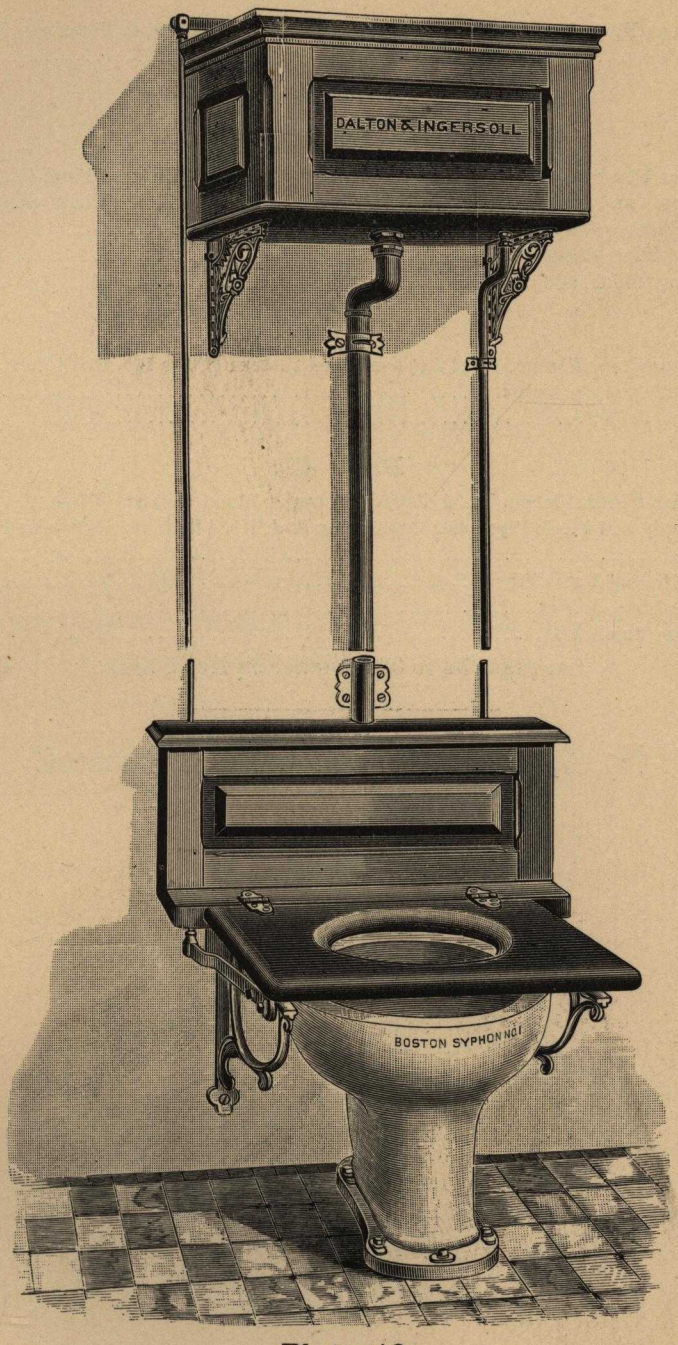
Plate 48.

The No. 1 Boston Siphon Water Closet, brass floor connection, with No. 4 After-wash Copper-Lined Cistern and Brackets, No. 4 Seat on Galvanized Brackets. For description of Closet, see page 44. For description of Cistern, see page 23. For price, see page 50.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 3.

No. 1, Boston Siphon Water Closet.

OPERATED BY SEAT.



Centre of Closet Outlet, 16¾ inches from wall.

Plate 49.

The No. 1 Boston Siphon Water Closet, brass floor connection, with No. 4 After-wash Copper-Lined Panelled Cistern and Brackets, No. 4 Seat on Galvanized Brackets, Polished Brass Supply and Flush Pipes and connecting rod. Cisterns and Seats furnished either in Cherry, Ash, Walnut, or Oak. For description of Closet, see page 44. For description of Cistern, see page 23. For price, see page 50.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 4.

Boston Siphon Water Closets, No. 1.

Plate 46.

Closet with Brass Floor Flange, No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain as shown $40.00

If seats are desired, see pages 34 to 38.

Plate 47.

Closet with Brass Floor Flange, and No. 1 Panelled Copper-Lined Cistern (Plate 4), Polished Brass Supply and Flush Pipe, with No. 7 Seat, Brackets, Pull, and Chain as shown... $68.75
Add for Nickel-Plating Pipe..... 2.50
If without Brass Pipe, deduct..... 12.50
If with Mahogany finish, add 5.00

Plate 48.

Closet with Brass Floor Flange, No. 4 Copper-Lined Cistern (Plate 16), No. 4 Seat, on Galvanized Brackets as shown $52.50
If for No. 2 Seat, deduct..... 1.50

Plate 49.

Closet with Brass Floor Flange, No. 4 Panelled Copper-Lined Cistern (Plate 16), Polished Brass Supply and Flush Pipes and Connecting Rod, No. 4 Seat on Galvanized Brackets as shown..... $73.50
Add for Nickel-Plating Brass Pipes 2.50
If without Brass Pipe, deduct 12.50
If with Mahogany finish, add..... 5.00

See pages 34 to 38 for other styles of seats.

No. 1, Boston Siphon Closet Embossed.

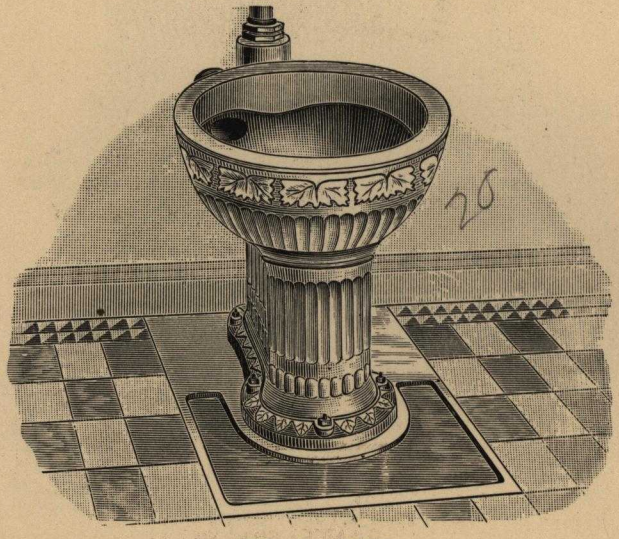


Plate 49½.

To above price add for Embossed Closet $6.00
" " " " " decorated in colors 12,00

The Embossed Closets furnished in either White or Ivory ground. Closets decorated in colors to order.

Boston Siphon Closet, No. 2.

In operation, this closet is the same as the No. 1, but differs slightly in construction, as it is not complete in itself, requiring a trap under the floor (this trap is provided and placed in position by the plumber), on which the closet is placed. This closet will work with any elevation of cistern, but requires the flush pipe to lead straight down to the closet without bends or offsets, except the one under the cistern as shown in the cut, and that to lead only back to the wall against which the closet and cistern is placed.

These conditions are absolutely necessary for the perfect working of the closet.

Size of flush pipe to be used, lead pipe, $1\frac{1}{4}$ in.; brass tubing, $1\frac{1}{2}$ in.

No. 2, Boston Siphon Water Closet.

OPERATED BY PULL AND CHAIN.

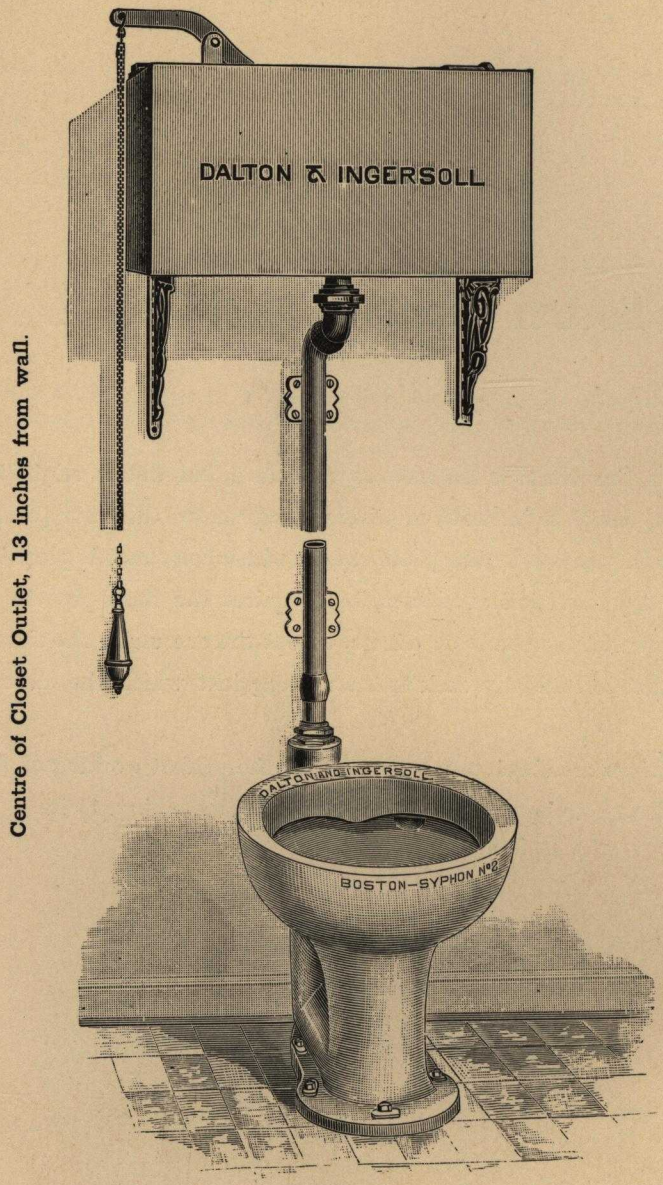


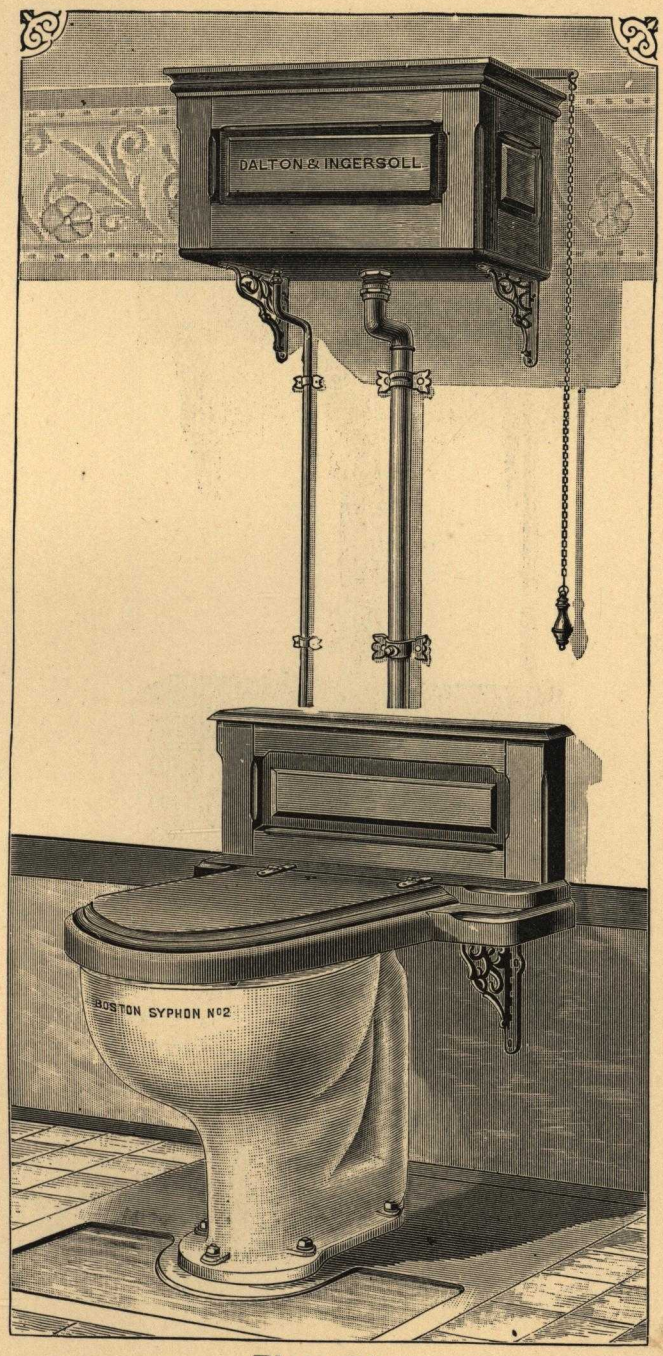
Plate 50.

The No. 2 Boston Siphon Water Closet, with No. 1 Sure-Supply Copper-Lined Cistern and Brackets. For description of Closet, see page 51. For description of Cistern, see page 14. For price, see page 56. If seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 5.

No. 2, Boston Siphon Water Closet.

OPERATED BY PULL AND CHAIN.



Centre of Closet Outlet, 13 inches from wall.

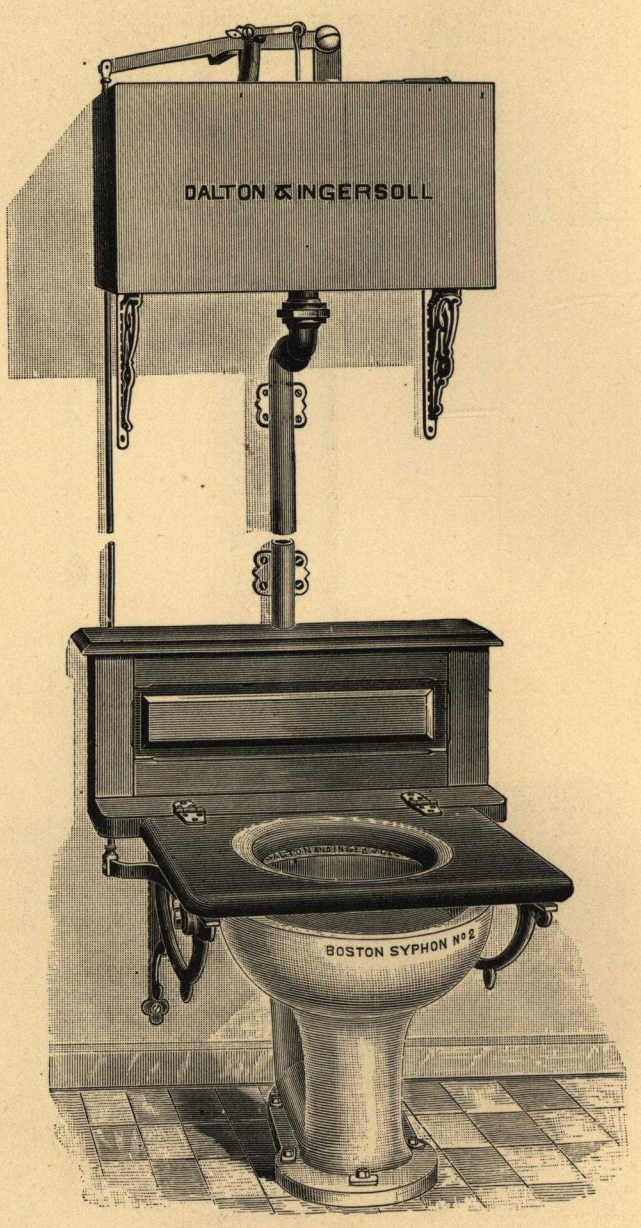
Plate 51.

The No. 2 Boston Siphon Water Closet, with No. 1 Sure-Supply Copper-Lined Panelled Cistern and Brackets, No. 7 Seat and Brackets, Polished Brass Supply and Flush Pipes. Cisterns and Seats furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 51. For description of Cistern, see page 14. For price, see page 56.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 6.

No. 2, Boston Siphon Water Closet.

OPERATED BY SEAT.



Centre of Closet Outlet, 13 inches from wall.

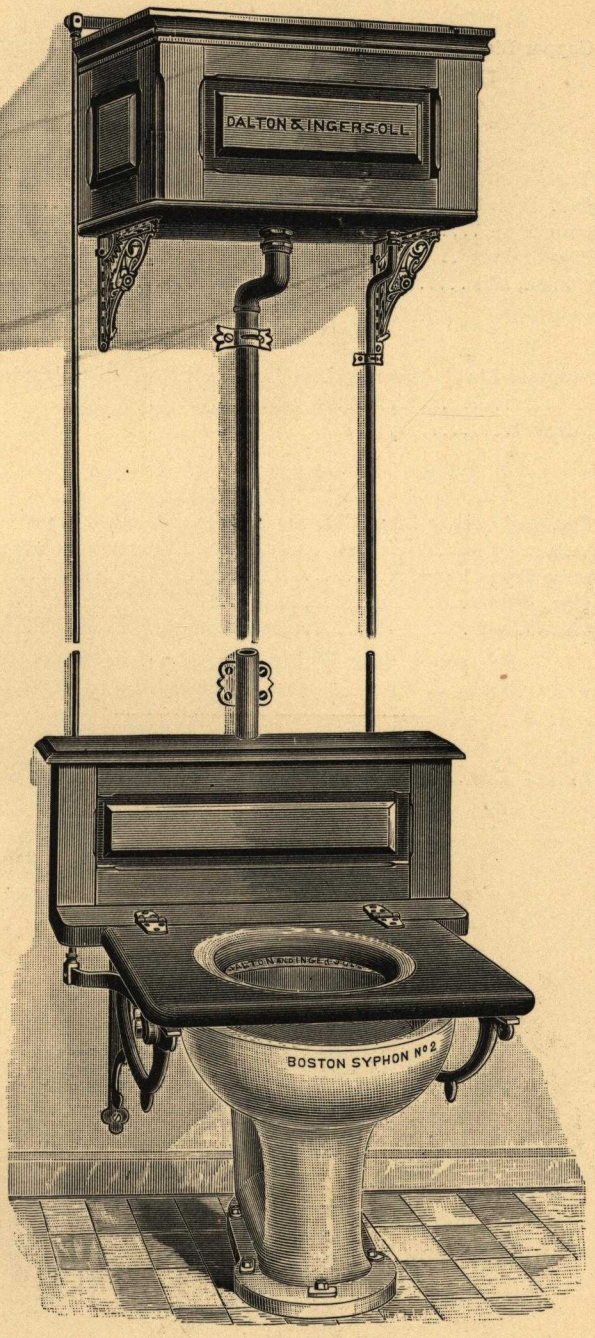
Plate 52.

The No. 2 Boston Siphon Water Closet, with No. 4 After-wash Copper-Lined Cistern and Brackets, No. 4 Seat on Galvanized Brackets. For description of Closet, see page 51. For description of Cistern, see page 23. For price, see page 56.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 7.

No. 2, Boston Siphon Water Closet.

OPERATED BY SEAT.



Centre of Closet Outlet, 13 inches from wall.

Plate 53.

The No. 2 Boston Siphon Water Closet, with No. 4 After-wash Copper-Lined Panelled Cistern and Brackets, No. 4 Seat on Galvanized Brackets, Polished Brass Supply and Flush Pipes and connecting rod. Cisterns and Seats furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 51. For description of Cistern, see page 23. For price, see page 56.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 8.

Boston Siphon Water Closets, No. 2.

Plate 50.

Closet with No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain, as shown $38.00

If seats are desired, see pages 34 to 38.

Plate 51.

Closet with No. 1 Panelled Copper-Lined Cistern (Plate 4), Polished Brass Supply and Flush Pipe, with No. 7 Seat, Brackets, Pull, and Chain as shown..... $66.75
Add for Nickel-Plating Pipe..... 2.50
If without Brass Pipe, deduct..... 12.50
If with Mahogany finish, add 5.00

Plate 52.

Closet with No. 4 Copper-Lined Cistern (Plate 16), No. 4 Seat on Galvanized Brackets as shown $50.50
If with No. 2 Seat, deduct..... 1.50

Plate 53.

Closet with No. 4 Panelled Copper-Lined Cistern (Plate 16), Polished Brass Supply and Flush Pipes and Connecting Rod, No. 4 Seat on Galvanized Brackets as shown $71.50
Add for Nickel-Plating Brass Pipes..... 2.50
If without Brass Pipe, deduct..... 12.50
If with Mahogany finish, add 5.00

See pages 34 to 38 for other styles of seats.

No. 2, Boston Siphon Closet Embossed.

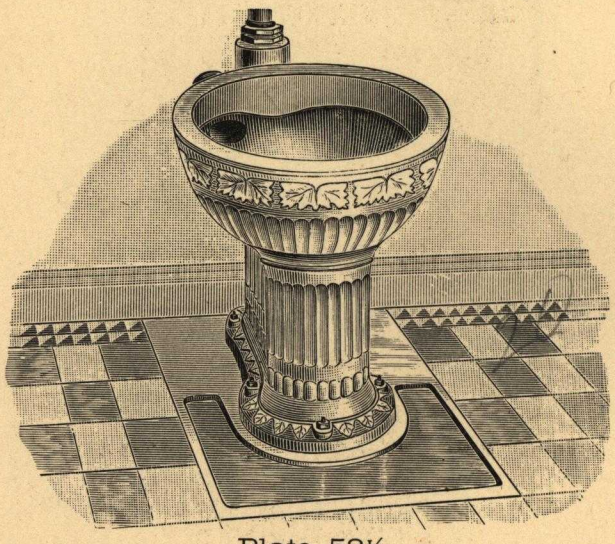
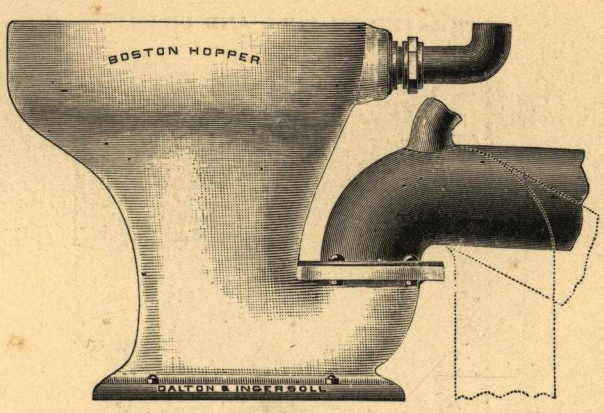


Plate 53½.

To above price add for Embossed Closet..... $6.00
" " " " " decorated in colors..... 12.00

The Embossed Closets furnished in either White or Ivory ground. Closets decorated in colors to order.

The Boston Hopper.

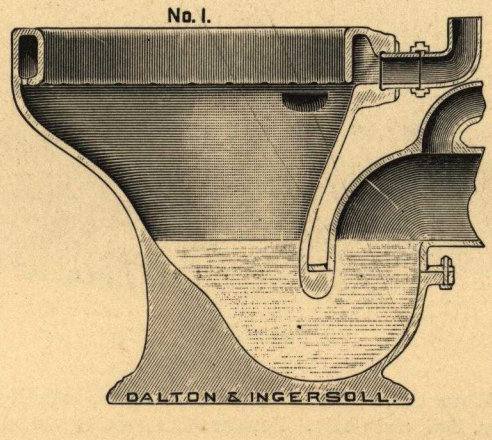


This Closet is considered to be by those who have seen it, the perfection of closets. It is a modification of what is known to the trade as a Short Hopper and Trap combined. Its exterior outline is in pedestal form which gives perfect support to the bowl. This construction will allow the seat to rest directly on the closet (dispensing with the use of seat legs if so desired), allowing a better opportunity for cleaning around the closet. This feature of construction will recommend itself to those looking for simplicity and cleanliness.

The bowl contains a pool of water 7×6 in. This is a very much larger pool of water than has been obtained heretofore in the Short Hopper principle; and until now it has been considered an impossibility to construct a Short Hopper with a large standing pool of water that would discharge its contents. This we do in the **Boston Hopper** with the same amount of water that is required to flush an ordinary Short Hopper.

In this Closet we have also overcome the objectionable and dangerous connection between the earthen trap and soil pipe. The outlet of the **Boston Hopper** is so constructed that the point of connection between the trap and soil pipe is under the water line, and, being submerged, it must be absolutely tight against the leakage of sewer air.

No. I.



In putting in fittings for this hopper, if the lead bend is to lead directly back, have fitting come flush with the finish, and $7\frac{1}{2}$ in. from the floor to centre of fitting.

The Boston Hopper Water Closet.

OPERATED BY PULL AND CHAIN.

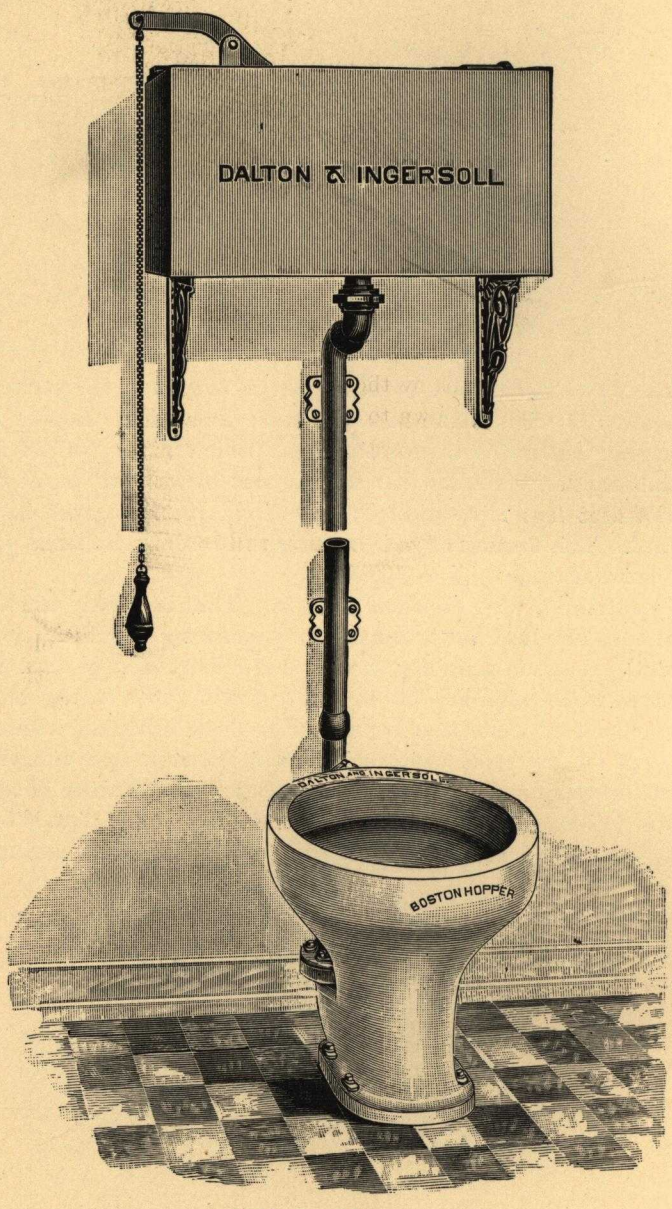


Plate 54.

The Boston Hopper Water Closet, Brass Flange connection, with No. 1 Sure-Supply Copper-Lined Cistern and Brackets, Pull, and Chain. For description of Closet, see page 57. For description of Cistern, see page 14. For price, see page 64. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 9.

The Boston Hopper Water Closet.

OPERATED BY PULL AND CHAIN.

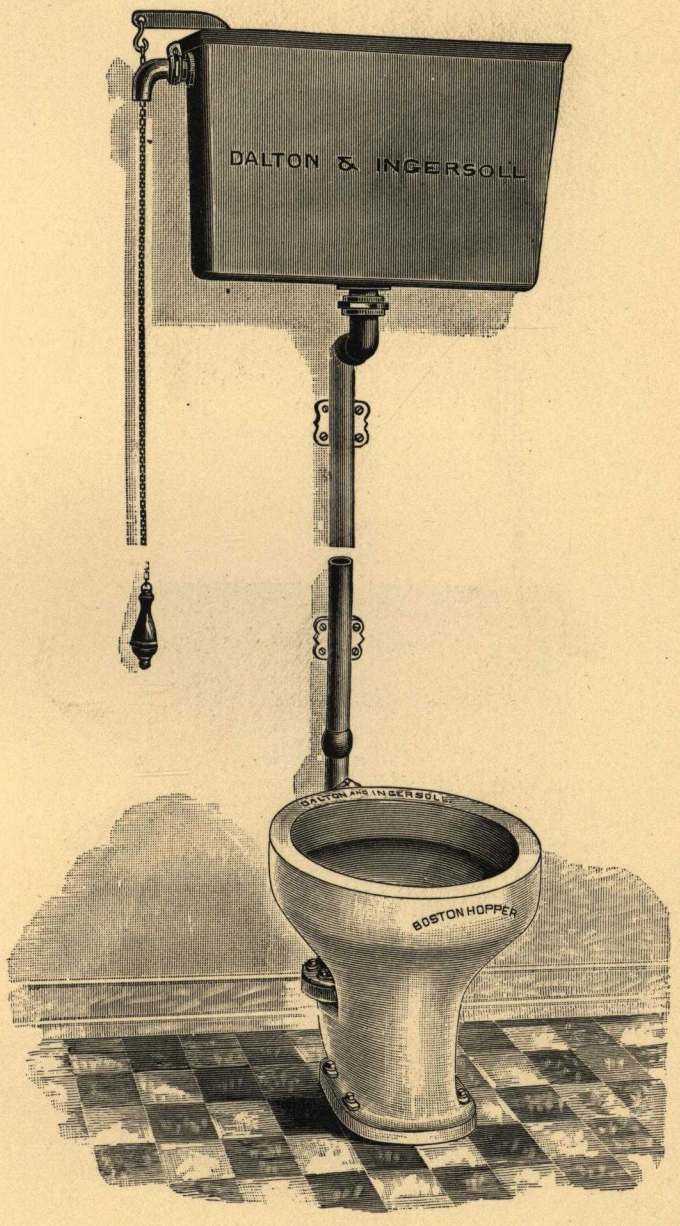


Plate 55.

The Boston Hopper Water Closet, Brass Flange connection, with No. 13 Sure-Supply Iron Cistern, Pull, and Chain. For description of Closet, see page 57. For description of Cistern, see page 14. For price, see page 64. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 10.

The Boston Hopper Water Closet.

OPERATED BY SEAT.

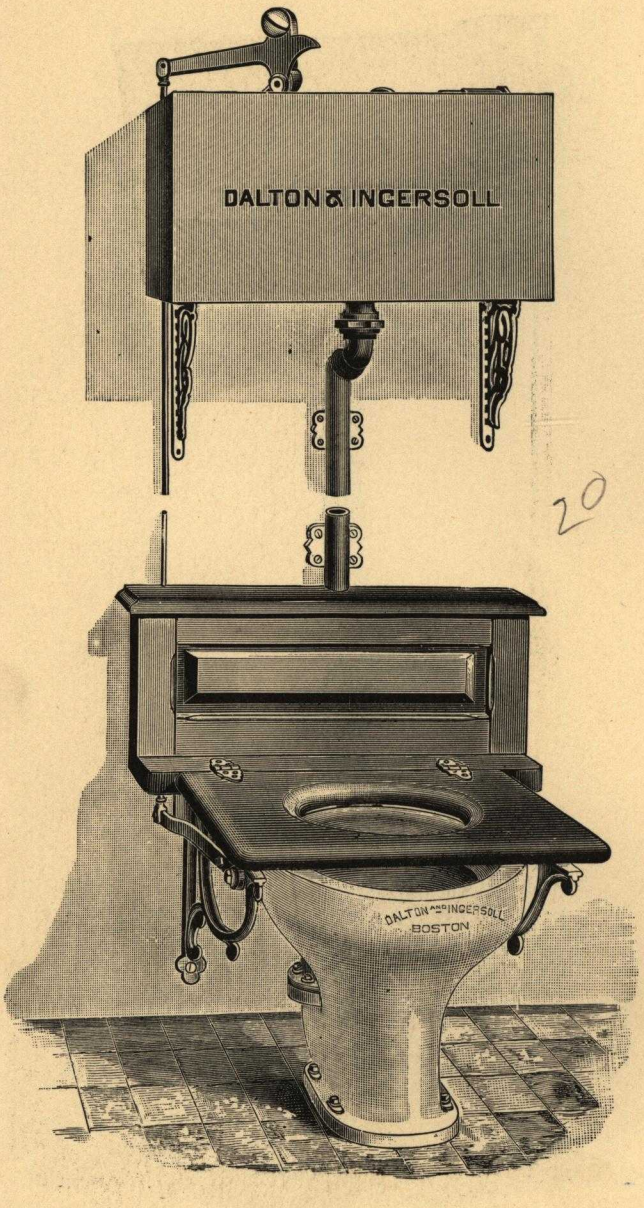


Plate 56.

The Boston Hopper Water Closet, Brass Flange connection, with No. 3 Fore and After Wash Copper-Lined Cistern and Brackets, No. 4 Seat on Galvanized Brackets. Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 57. For description of Cistern, see page 20. For price, see page 64.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 11.

The Boston Hopper Water Closet.

OPERATED BY SEAT.

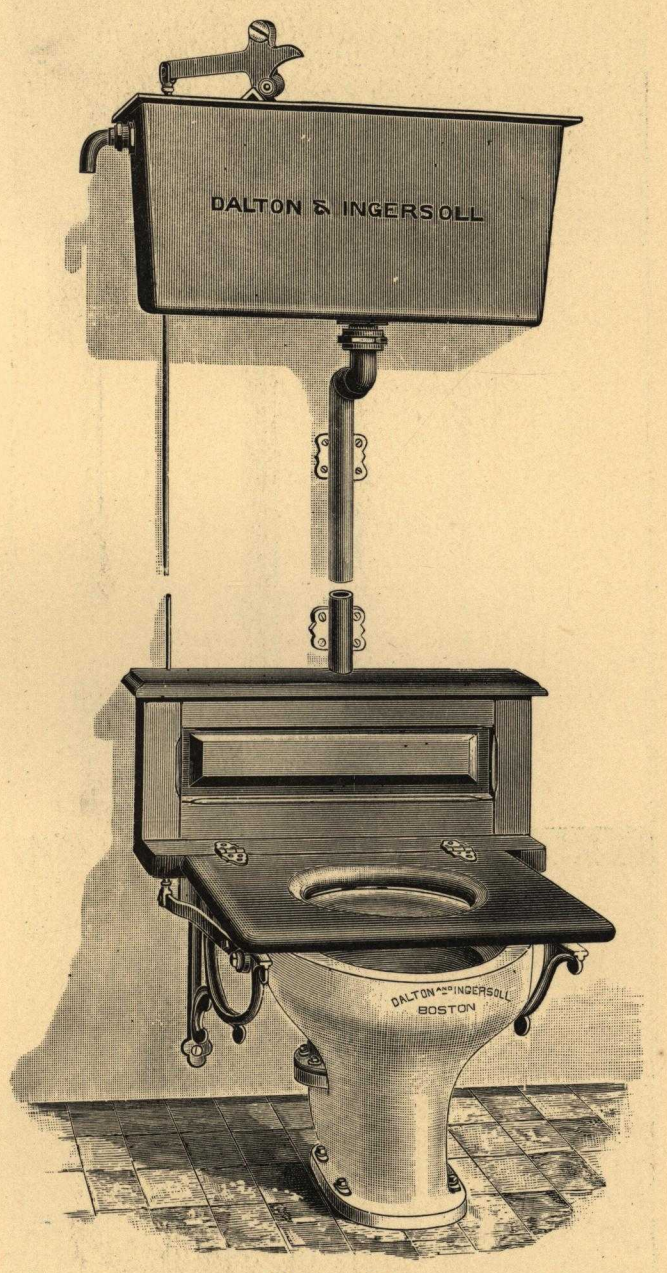


Plate 57.

The Boston Hopper Water Closet, Brass Flange connection, with No. 11 Fore and After Wash Iron Cistern, No. 4 Seat on Galvanized Brackets. Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 57. For description of Cistern, see page 20. For price, see page 64.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 12.

The Boston Hopper Water Closet.

OPERATED BY PULL AND CHAIN.

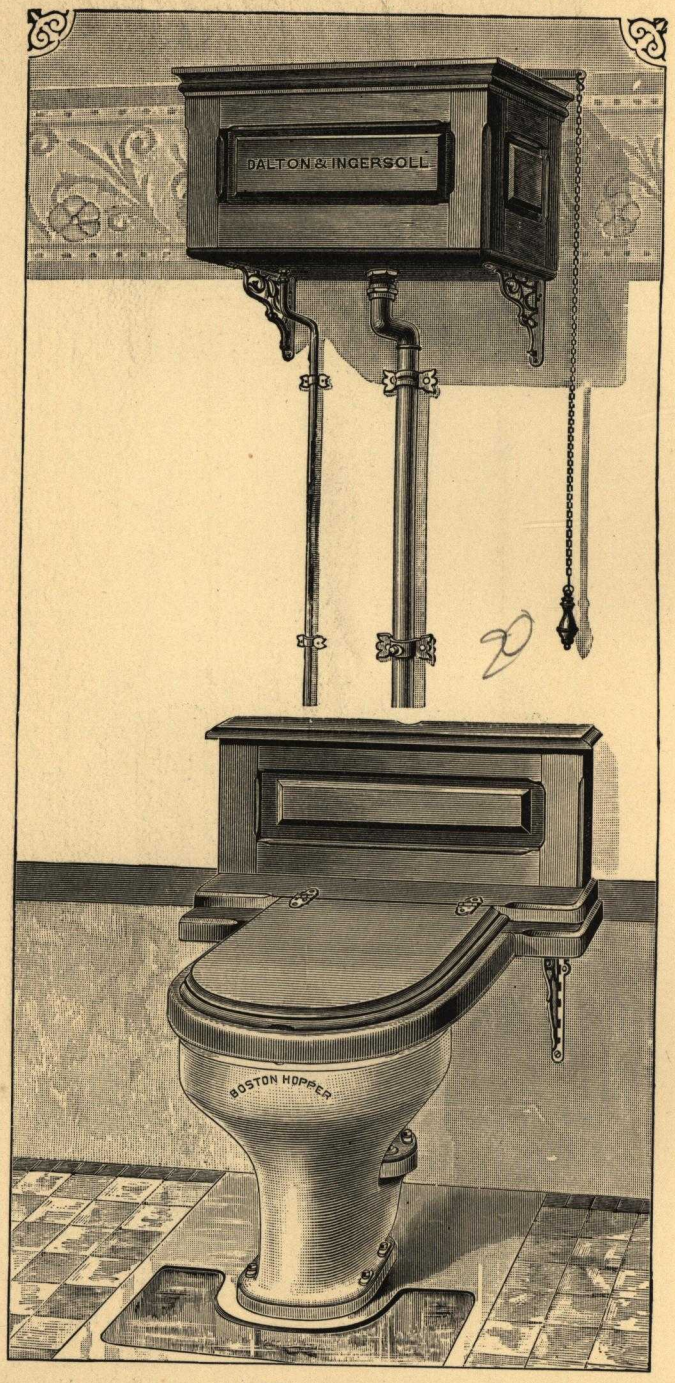


Plate 58.

The Boston Hopper Water Closet, Brass Flange connection, with No 5 Sure-Supply Copper-Lined Panelled Cistern and Brackets, No. 7 Seat, Brackets, Polished Brass Supply and Flush Pipe. Cistern and Seat furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 57. For description of Cistern, see page 14. For price, see page 64.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 13.

The Boston Hopper Water Closet.

OPERATED BY SEAT.

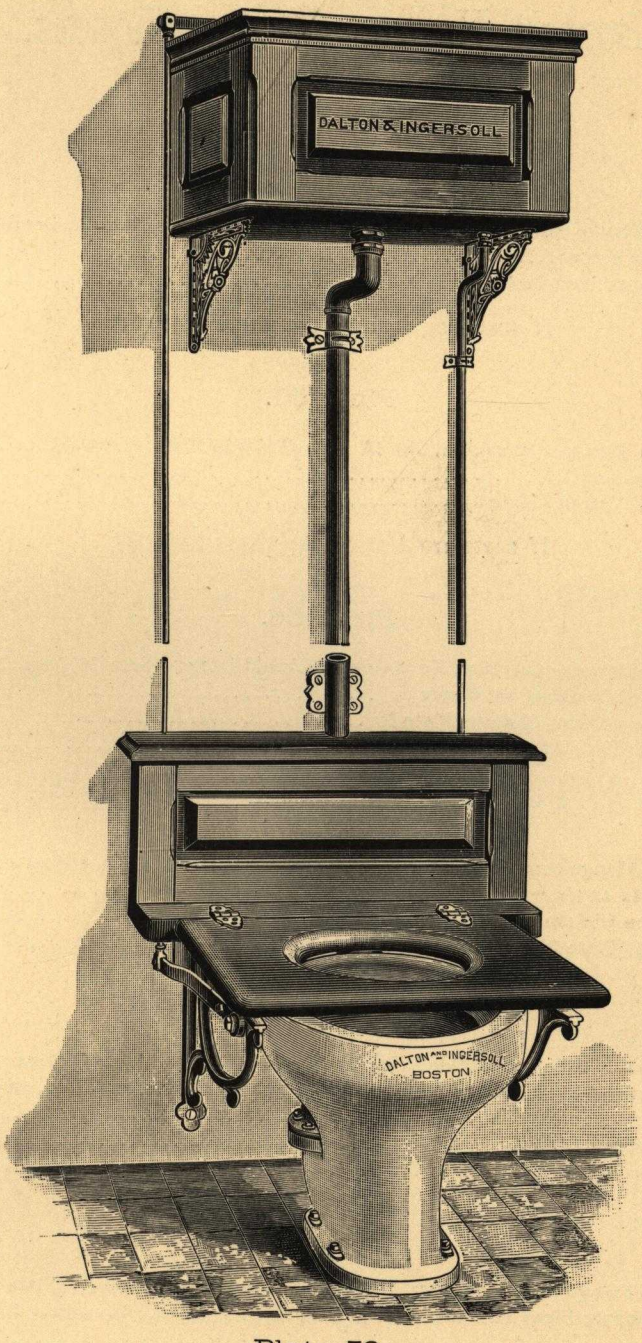


Plate 59.

The Boston Hopper Water Closet, Brass Flange connection, with No. 7 Fore and After Wash Copper-Lined Panelled Cistern and Brackets, No. 4 Seat on Galvanized Brackets, Polished Brass Supply and Flush Pipes and Connecting Rod. Cistern and Seat finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 57. For description of Cistern, see page 20. For price, see page 64.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 14.

Boston Hopper Water Closets.

Plate 54.

Closet with Brass Flange connection, No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain as shown $30.00
If with No. 5 Copper-Lined Cistern (Plate 5) 29.00

If seats are desired, see pages 34 to 38.

Plate 55.

Closet with Brass Flange connection, No. 13 Iron Cistern (Plate 7), Brackets, Pull, and Chain as shown $26.00
If with No. 9 Iron Cistern (Plate 6) 28.00

If seats are desired, see pages 34 to 38.

Plate 56.

Closet with Brass Flange connection, No. 3 Copper-Lined Cistern (Plate 12), and No. 4 Seat on Galvanized Brackets as shown $42.00
If with No. 7 Copper-Lined Cistern (Plate 13) 41.00
If with No. 2 Seat (Plate 32), deduct 1.50

Plate 57.

Closet with Brass Flange connection, No. 11 Iron Cistern (Plate 14), No. 4 Seat on Galvanized Brackets as shown $40.00
If with No. 15 Iron Cistern (Plate 15) 38.00
If with No. 2 Seat (Plate 32), deduct 1.50

Plate 58.

Closet with Brass Flange connection, No. 5 Panelled Copper-Lined Cistern (Plate 5), Polished Brass Supply and Flush Pipe, and No. 7 Seat, Brackets, Pull, and Chain as shown $58.75
Add for Nickel-Plating Pipes 2.50
If Brass Pipe is not desired, deduct 12.50

Plate 59.

Closet with Brass Flange connection, No. 7 Panelled Copper-Lined Cistern (Plate 13), Brass Flush and Supply Pipes and Connecting Rod, No. 4 Seat on Galvanized Brackets as shown $63.50
Add for Nickel-Plating Pipes 2.50
If with No. 2 Seat (Plate 32), deduct 1.50
If Brass Pipe is not desired, deduct 12.50

See pages 34 to 38 for other styles of seat.

For LEAD BENDS to be used with these Closets, see page 140.

THE

VENDOME, ❋ ❋ IDEAL, ❋ ❋ SOMERSET,

LENOX, ❋ ❋ ❋ AND ❋ ❋ ❋ BEAU IDEAL

WASH-OUT WATER-CLOSET APPARATUS.

The Wash-out Water Closet we make in a variety of forms: —

The **VENDOME**, are oval top, back outlet, both plain and embossed.

The **IDEAL**, square top, back outlet.

The **SOMERSET**, oval top, front outlet, embossed.

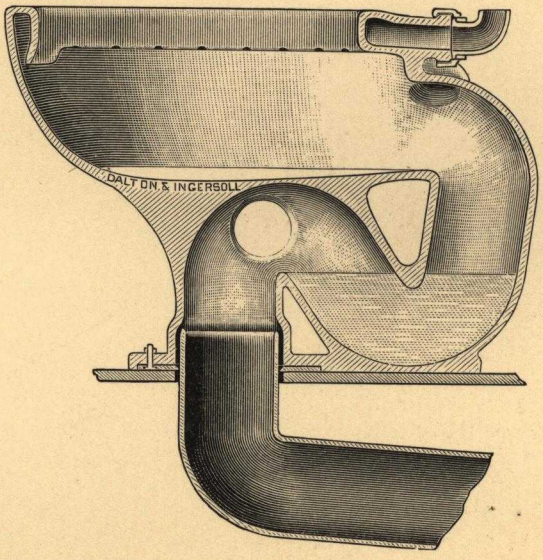
The **LENOX**, oval top, front outlet, plain.

The **BEAU IDEAL**, square top, front outlet, embossed.

Of these, the Vendome and Somerset have proved very popular, and are acknowledged to be the best of their class, for the reason that every detail in their construction has been carefully looked after. The flushing rims are so constructed as to deliver the water to the basin without spattering, and at the same time effectually removing all deposit.

The weak and dangerous point in the connection between the earthenware and soil pipe has been entirely remedied in these closets as in our siphon closet.

The sectional cut of our Patent Floor Flange used in connection with our closets, shows the lead connection of the soil pipe running up through it and into the discharge end of the closet one inch. This construction not only gives you the packing between the flanges, but also up into and around and between the lead pipes and the earthen walls, and if the packing substance fails to press up the entire length of the socket space, the balance will be filled with water coming from the bowl, which will form a trap around the joint, making it absolutely tight.



SECTION OF VENDOME.

The Vendome Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

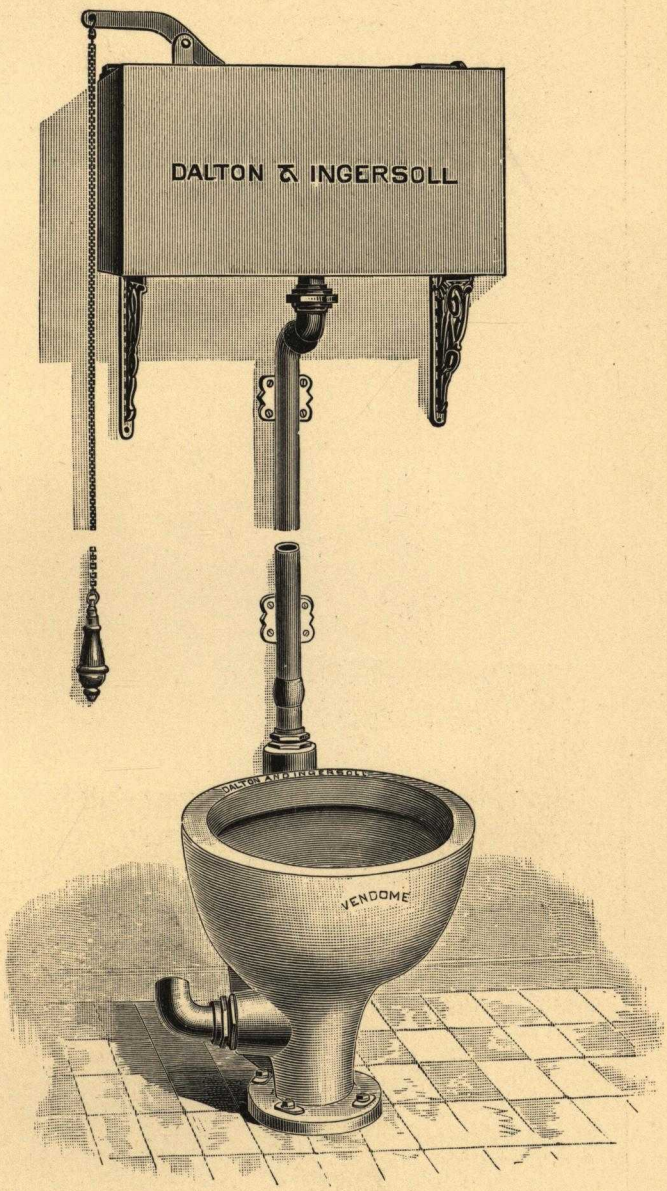


Plate 60.

The Vendome Wash-out Water Closet, Brass Floor Flange, with No. 1 Sure-Supply Copper-Lined Cistern, Brackets, Pull, and Chain. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 78. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 15.

The Vendome Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

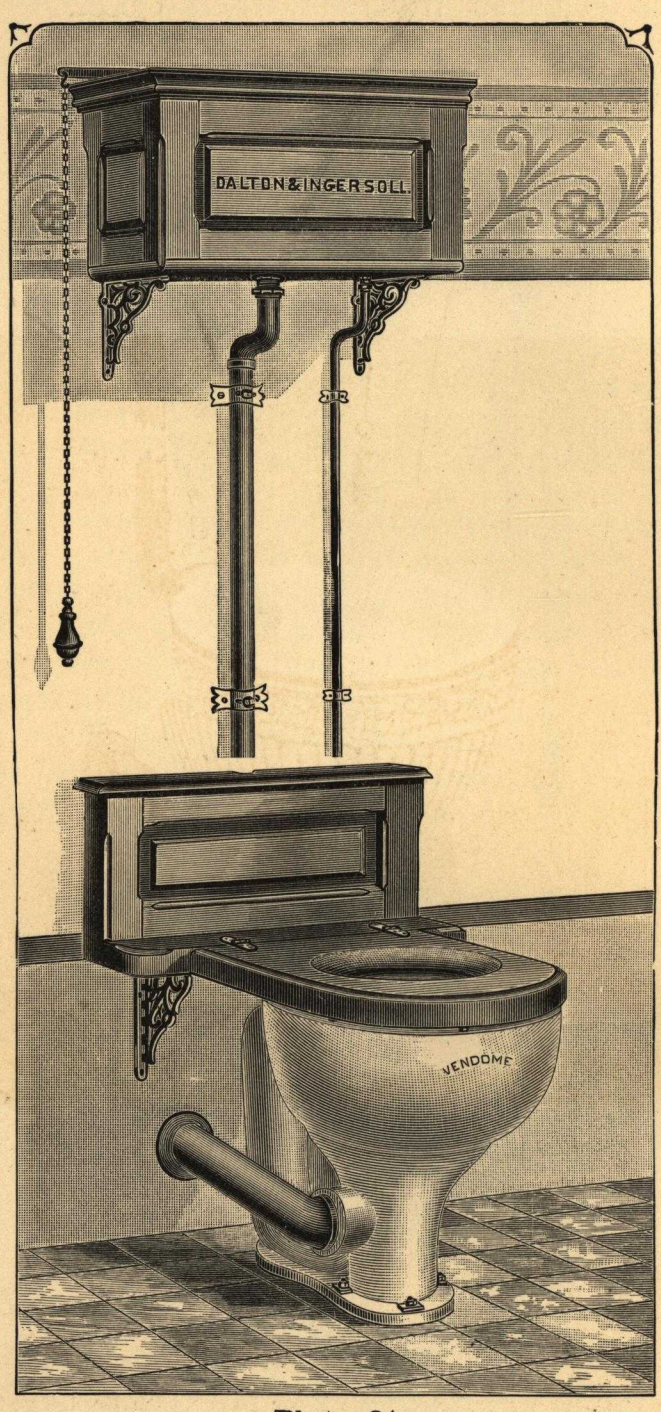


Plate 61.

The Vendome Wash-out Water Closet, Brass Floor Flange, with No. 5 Sure-Supply Copper-Lined Panelled Cistern, Brackets, Pull, and Chain, with No. 6 Seat and Brackets, Polished Brass Supply and Flush Pipe. Cistern and Seat finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 16.

The Embossed Vendome Water Closet.

DECORATED.

PLATE 104.

PLATE 62½.

Price, add to list of Plate 62 - - - - - - - - - $10.00

Can be furnished in Pink and Gold, Blue and Gold, or Gold only.

The Embossed Vendome Water Closet.

OPERATED BY PULL AND CHAIN.

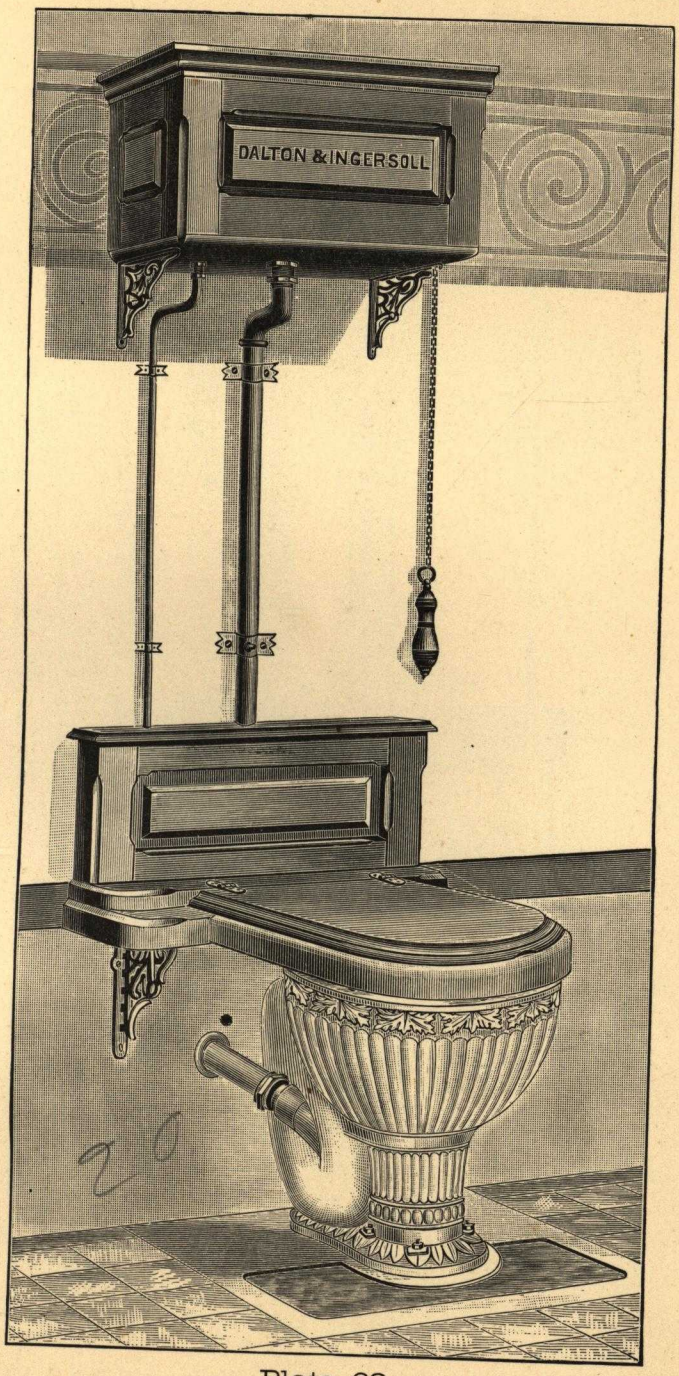


Plate 62.

The Embossed Vendome Wash-out Water Closet, Brass Floor Flange, with No. 5 Sure-Supply Copper-Lined Panelled Cistern and Brackets, No. 7 Seat and Brackets, Polished Brass Supply and Flush Pipe. Closets furnished ivory tinted or white. Cistern and Seats finished in either Cherry, Ash, Walnut, Oak, or Mahogany. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 17.

The Vendome Wash-out Water Closet.

OPERATED BY SEAT.

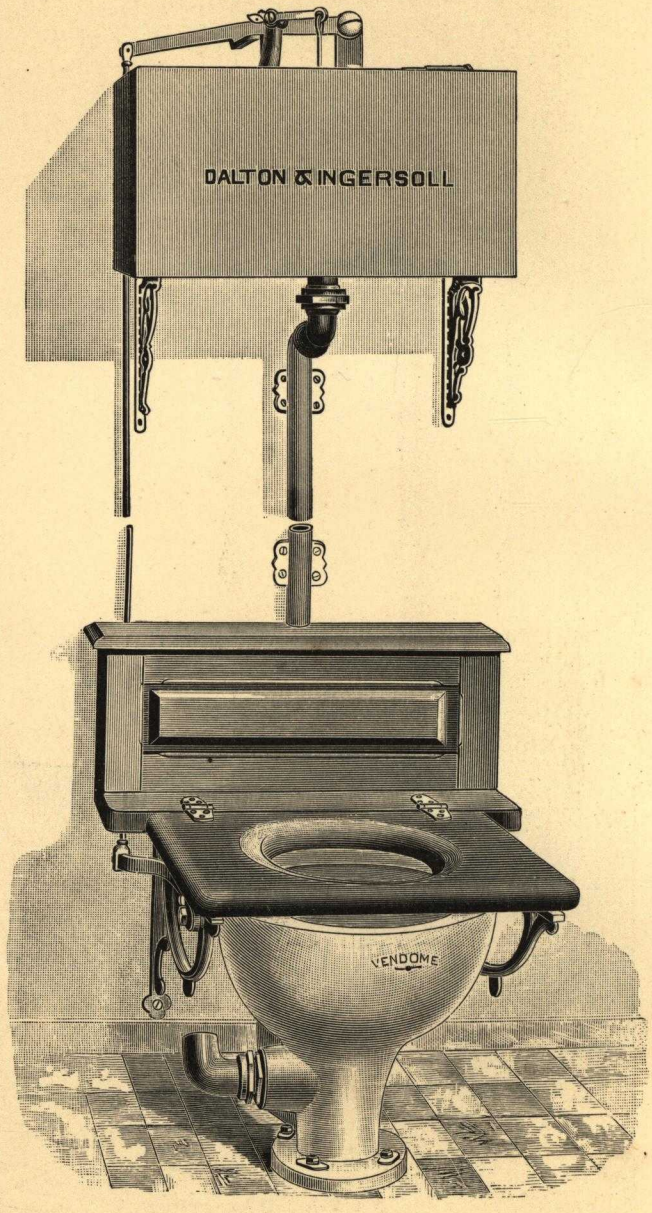


Plate 63.

The Vendome Wash-out Water Closet, Brass Floor Flange, with No. 4 After-Wash Copper-Lined Cistern and Brackets, No. 4 Seat on Galvanized Brackets. Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 23. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 18.

The Vendome Wash-out Water Closet.

OPERATED BY SEAT.

Plate 64.

The Vendome Wash-out Water Closet, Brass Floor Flange, No. 8 After-wash Copper-Lined Panelled Cistern, No. 4 Seat on Galvanized Brackets, Polished Brass Supply and Flush Pipes and connecting rod. Cistern and Seat finished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 23. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 19.

The Ideal Square Top Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

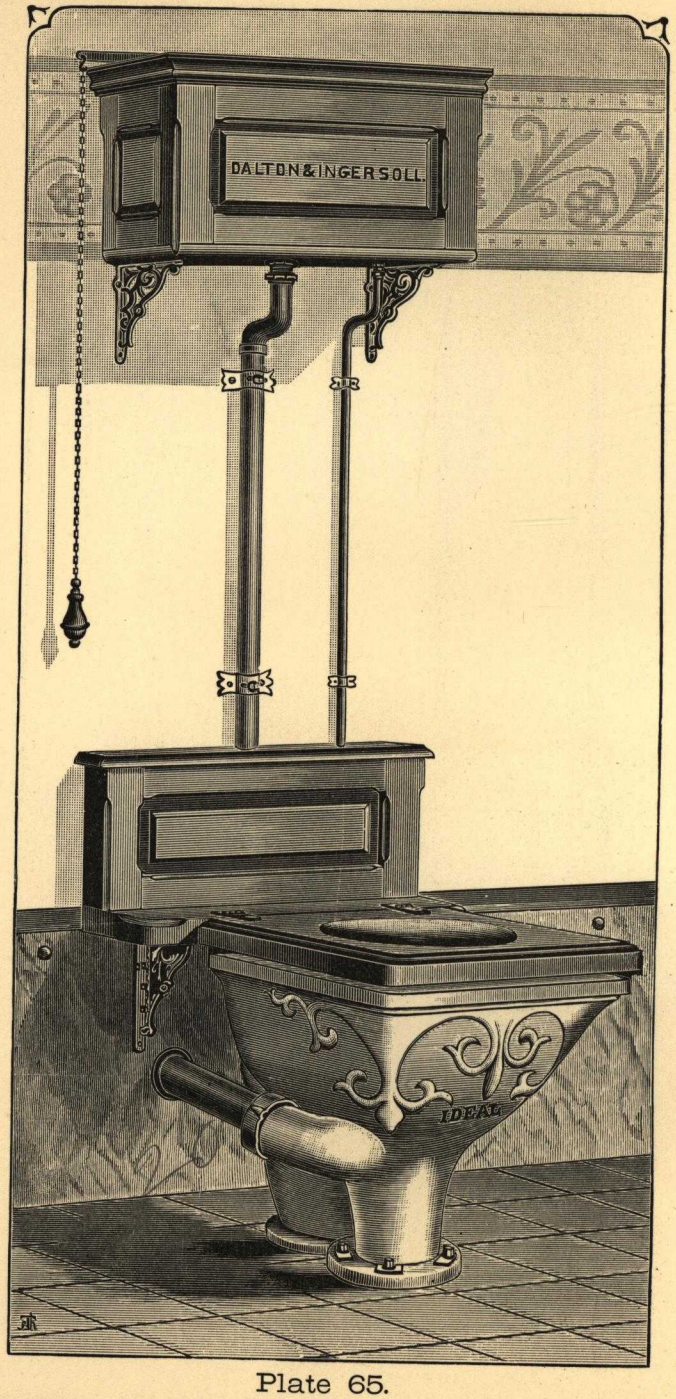


Plate 65.

The Ideal Square Top Wash-out Water Closet, Brass Floor Flange, with No. 5 Sure-Supply Copper-Lined Panelled Cistern and Brackets, with No. 5 Seat and Brackets, Polished Brass Supply and Flush Pipe. Cistern and Seat furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 20.

The Beau Ideal Square Top Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

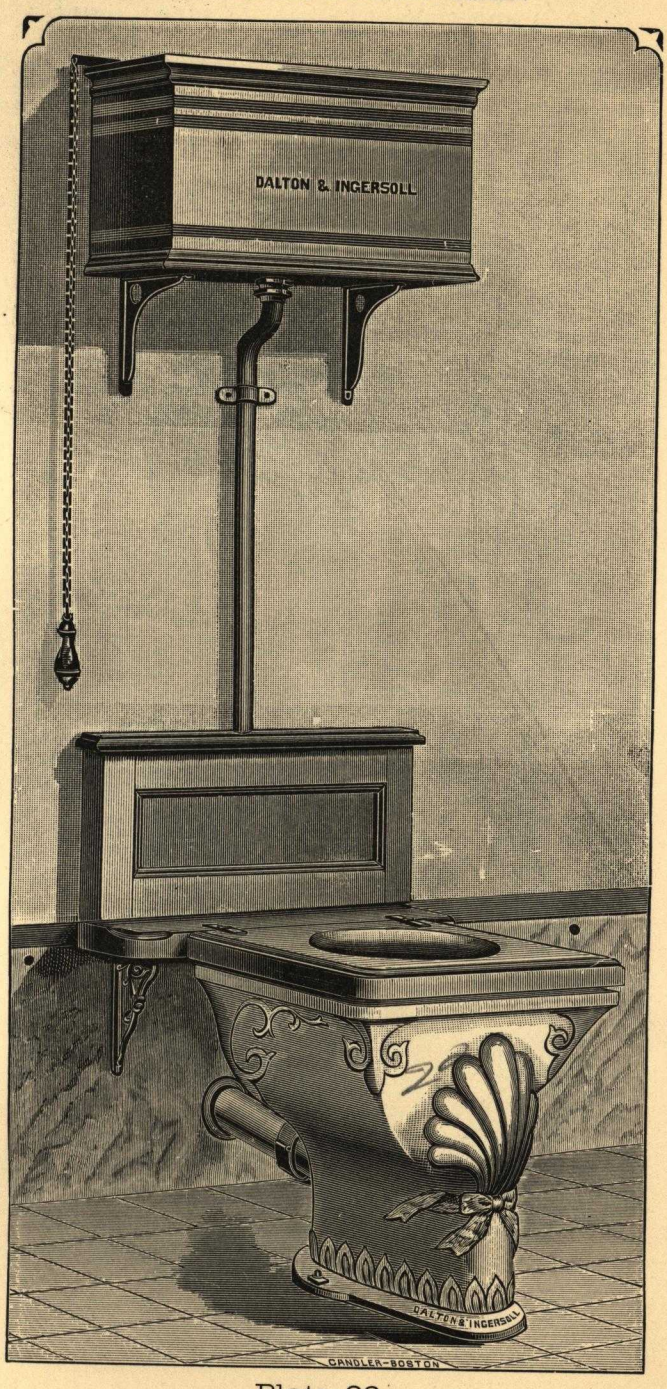


Plate 66.

The Beau Ideal Square Top Wash-out Water Closet, Brass Floor Flange, with No. 5 Sure-Supply Copper-Lined Panelled Cistern and Brackets, with No. 5 Seat and Brackets, Polished Brass Supply and Flush Pipes. Cistern and Seat furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 78.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 21.

The Lenox Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

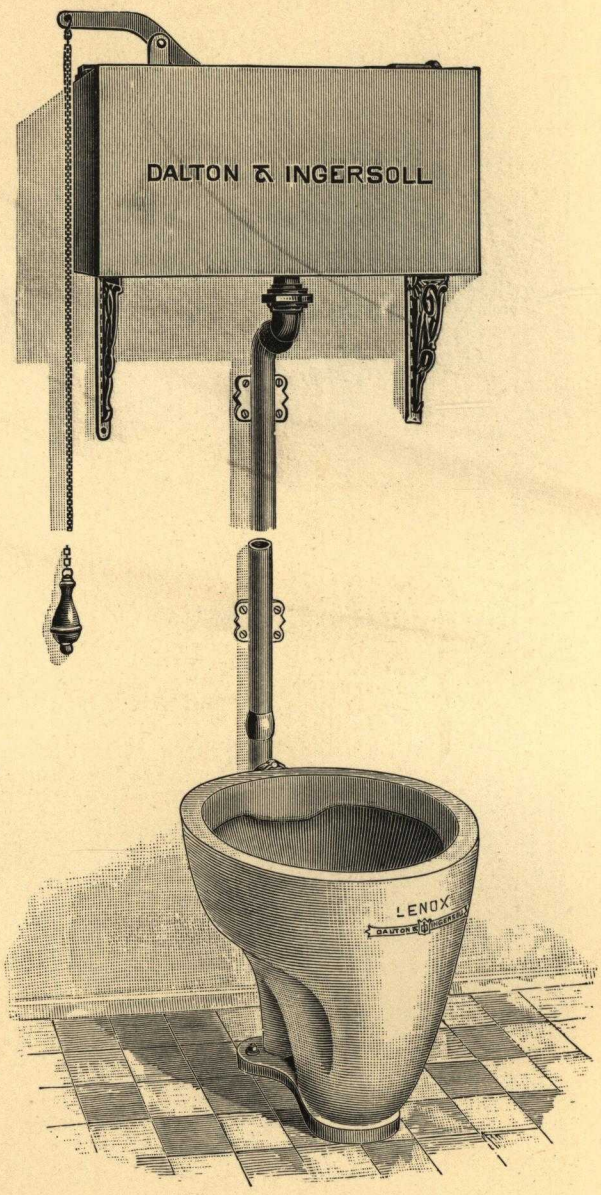


Plate 67.

The Lenox Wash-out Water Closet, Brass Floor Flange, with No. 1 Sure-Supply Copper-Lined Cistern and Brackets, Pull, and Chain. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 79. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 22.

The Lenox Wash-out Water Closet.

OPERATED BY SEAT.

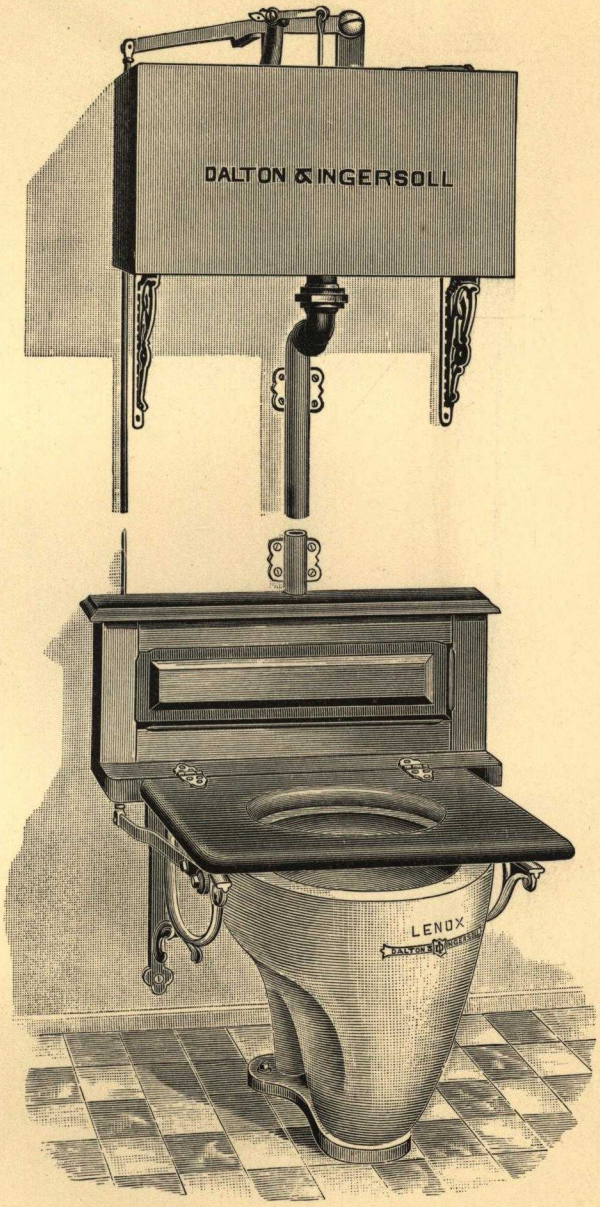


Plate 68.

The Lenox Wash-out Water Closet, Patent Brass Floor Flange, with No. 4 After-wash Copper-Lined Cistern, with No. 4 Seat on Galvanized Brackets. Seats furnished in either Cherry, Ash, Walnut, or Oak. For description of Closet, see page 66. For description of Cistern, see page 23. For price, see page 79.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 32.

The Somerset Front-Outlet Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

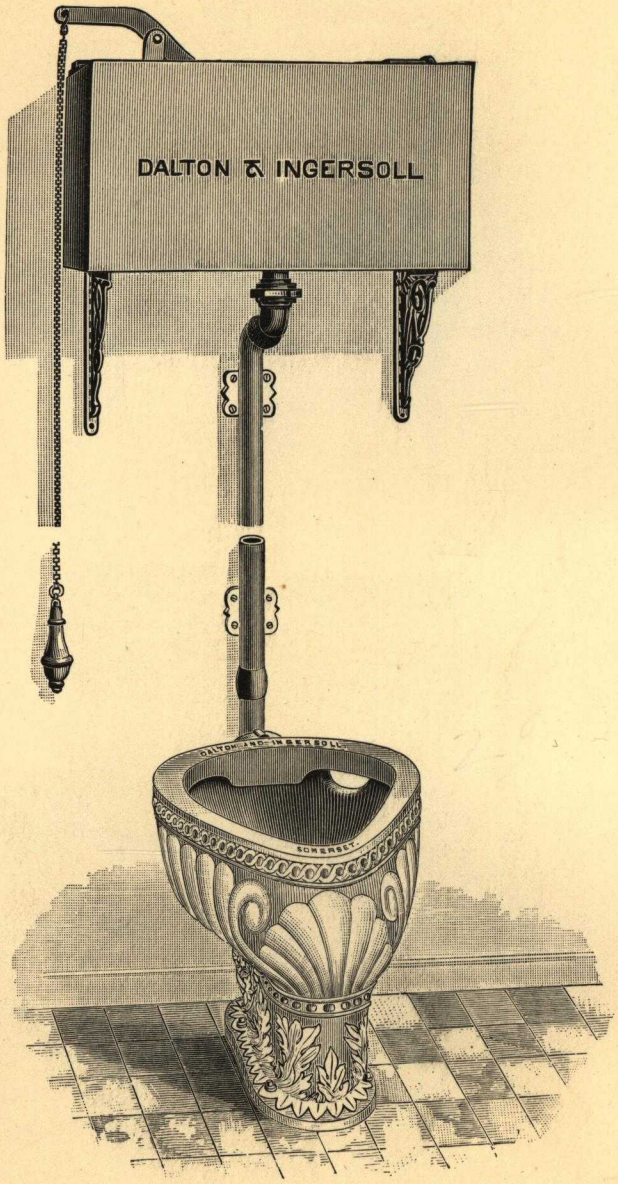


Plate 69.

The Somerset Water Closet, Brass Floor Flange, with No. 1 Sure-Supply Copper-Lined Cistern, Pull, Chain, and Brackets. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 79. If Seats are desired, see pages 33 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 33.

The Somerset Front-Outlet Wash-out Water Closet.

OPERATED BY PULL AND CHAIN.

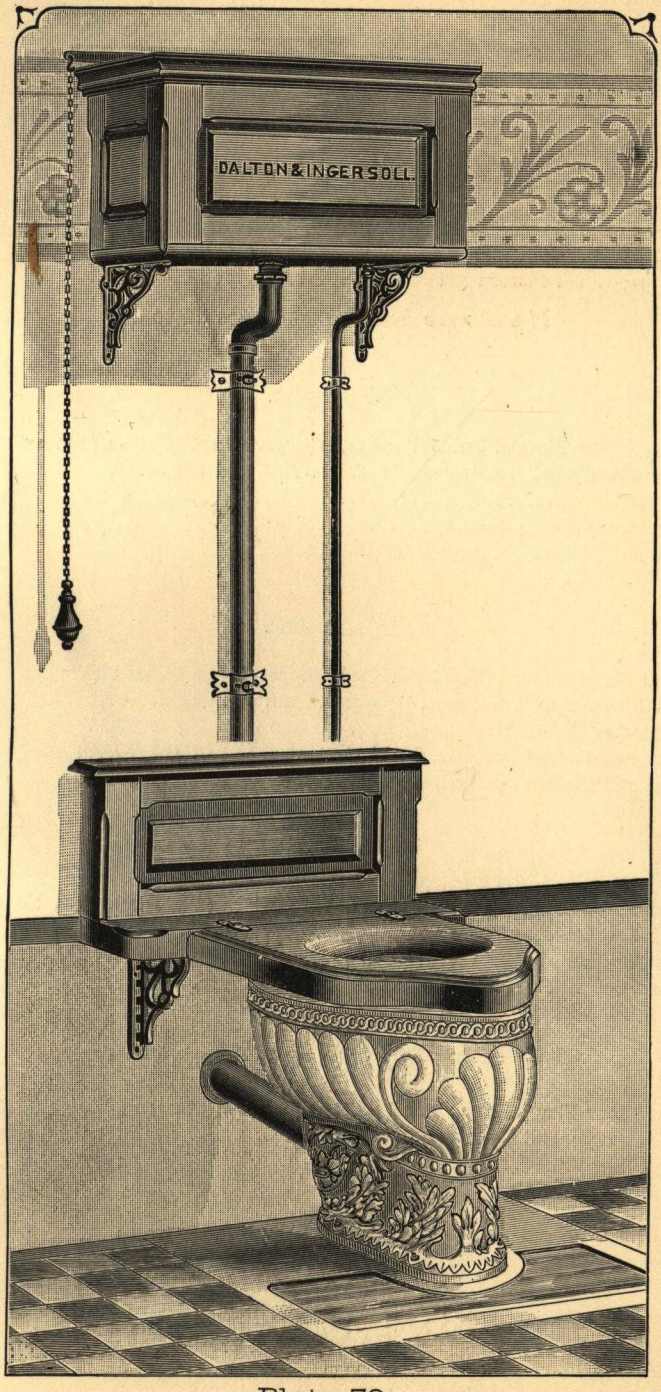


Plate 70.

The Somerset Water Closet, Brass Floor Flange, with No. 5 Sure-Supply Copper-Lined Panelled Cistern, and Brackets, No. 8 Seat and Brackets, Polished Brass Supply and Flush Pipe. Cistern and Seat furnished in either Cherry, Ash, Walnut, Oak, or Mahogany. For description of Closet, see page 66. For description of Cistern, see page 14. For price, see page 79.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 34.

Wash-out Water Closets.

Plate 60.

Closet with Brass Floor Flange, No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain	$35.75
If with No. 5 Copper-Lined Cistern (Plate 5)	34.75

If seats are desired, see pages 34 to 38.

Plate 61.

Closet with Brass Floor Flange, No. 5 Panelled Copper-Lined Cistern (Plate 5), Polished Supply and Flush Pipe, No. 6 Seat, Brackets, Pull, and Chain	$60.00
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50
If Mahogany Seat and Cistern are desired, add	5.00

Plate 62.

Closet with Brass Floor Flange, No. 5 Panelled Copper-Lined Cistern (Plate 5), Polished Supply and Flush Pipe, No. 7 Seat, Brackets, Pull, and Chain	$69.00
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50
If Mahogany Seat and Cistern are desired, add	5.00

Plate 63.

Closet with Brass Floor Flange, No. 4 Copper-Lined Cistern (Plate 16), with No. 4 Seat on Galvanized Brackets	$47.00
If with No. 8 Cistern (Plate 17)	46.00
If with No. 2 Seat, deduct	1.50

Plate 64.

Closet with Brass Floor Flange, No. 8 Panelled Copper-Lined Cistern (Plate 17), Brass Supply and Flush Pipe, and Connecting Rod, with No. 4 Seat on Galvanized Brackets	$68.25
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50

Plate 65.

Closet with Brass Floor Flange, No. 5 Panelled Copper-Lined Cistern (Plate 5), Brass Supply and Flush Pipe, and No. 5 Seat, Brackets, Pull, and Chain	$65.00
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50

Wash-out Water Closets.

Plate 66.

Closet with Brass Floor Flange, No. 5 Panelled Copper-Lined Cistern (Plate 5), Brass Supply and Flush Pipe, with No. 5 Seat, Brackets, Pull, and Chain	$70.00
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50
If Mahogany Seat and Cistern are desired, add	5.00

Plate 67.

Closet with Brass Floor Flange, No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain	$35.75
If with No. 5 Copper-Lined Cistern (Plate 5)	34.75

If seats are desired, see pages 34 to 38.

Plate 68.

Closet with Brass Floor Flange, No. 4 Copper-Lined Cistern (Plate 16), with No. 4 Seat on Galvanized Brackets	$47.00
If with No. 8 Cistern (Plate 17)	46.00
If with No. 2 Seat (Plate 32), deduct	1.50

Plate 69.

Closet with Brass Floor Flange, No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain	$41.00
If with No. 5 Copper-Lined Cistern (Plate 5)	40.00

If seats are desired, see pages 34 to 38.

Plate 70.

Closet with Brass Floor Flange, No. 5 Panelled Copper-Lined Cistern (Plate 5), Brass Supply and Flush Pipe, No. 8 Seat, Brackets, Pull, and Chain	$65.00
Add for Nickel-Plating Pipe	2.50
If Brass Pipes are not desired, deduct	12.50
If Mahogany Seat and Cistern are desired, add	5.00

THE CLARENDON AND DARTMOUTH

COMBINED HOPPERS AND TRAPS,

IN ONE PIECE OF EARTHENWARE.

Improved Flushing-Rim Hopper Combinations.

OVAL AND SQUARE EARTHEN HOPPERS,

With Earthenware, Lead, and Iron Traps.

The Dartmouth Oval Top Combined Hopper and Trap.

OPERATED BY PULL AND CHAIN.

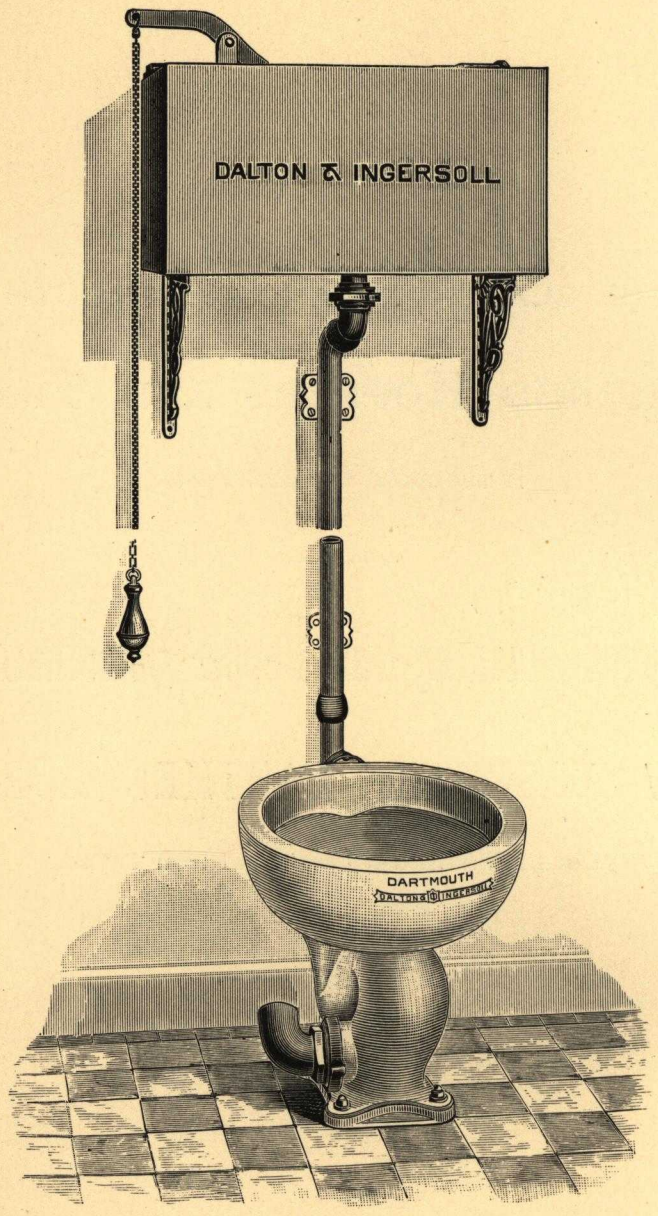


Plate 71.

The Dartmouth Hopper Water Closet, with No. 1 Sure-Supply Copper-Lined Cistern, Brackets, Pull, and Chain. For description of Cistern, see page 14. For price, see page 88. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 35.

The Clarendon Square Top Combined Hopper and Trap.

OPERATED BY PULL AND CHAIN.

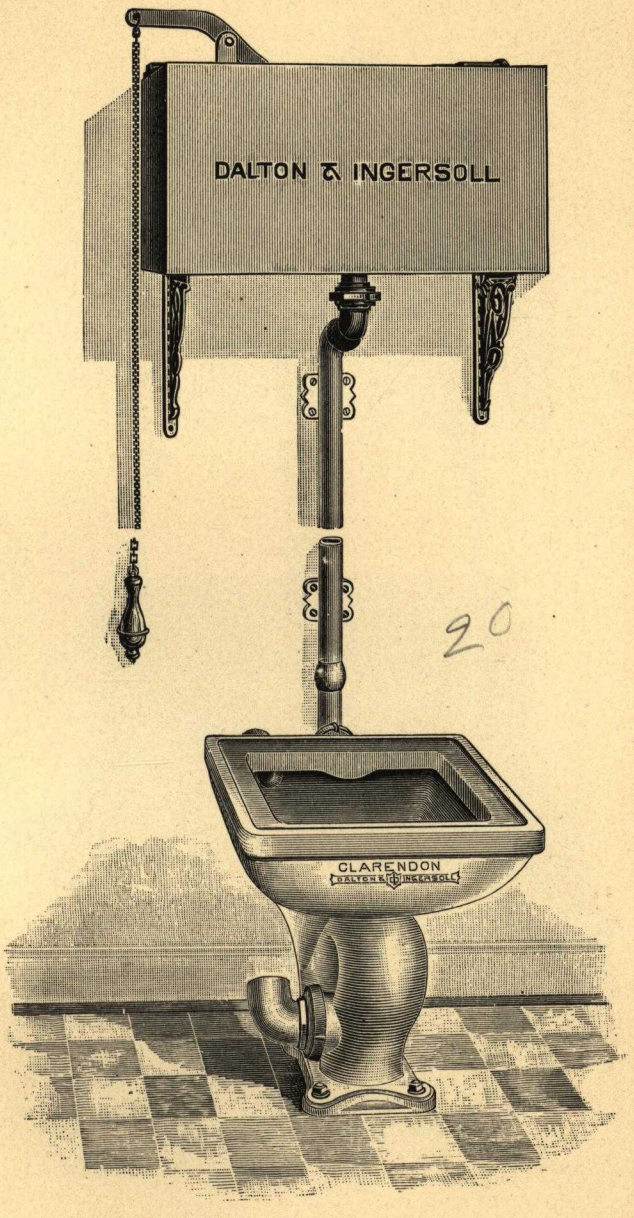


Plate 72.

The Clarendon Hopper Water Closet, with No. 1 Sure-Supply Copper-Lined Cistern, Brackets, Pull, and Chain. For description of Cistern, see page 14. For price, see page 88. If Seats are desired, see pages 34 to 38.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 36.

The Dartmouth Oval Top Combined Hopper and Trap.

OPERATED BY SEAT.

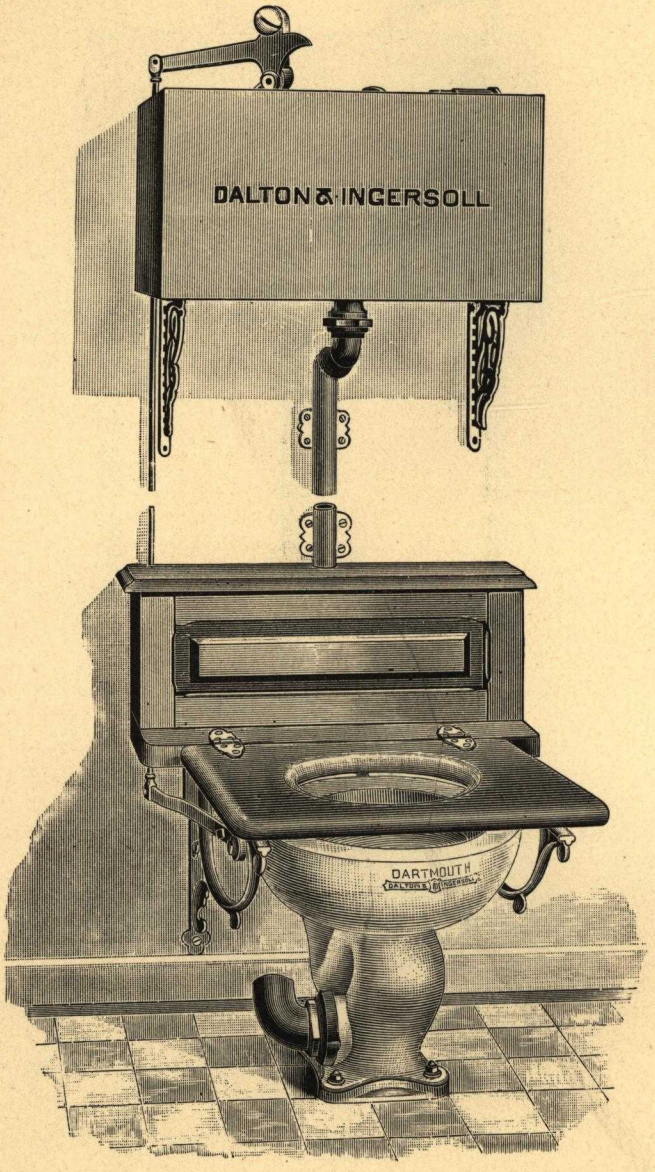


Plate 73.

The Dartmouth Hopper Water Closet, No. 3 Fore and After Wash Copper-Lined Cistern, and Brackets, No. 4 Seat on Galvanized Brackets. Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Cistern, see page 20. For price, see page 89.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 37.

The Clarendon Square Top Combined Hopper and Trap.

OPERATED BY SEAT.

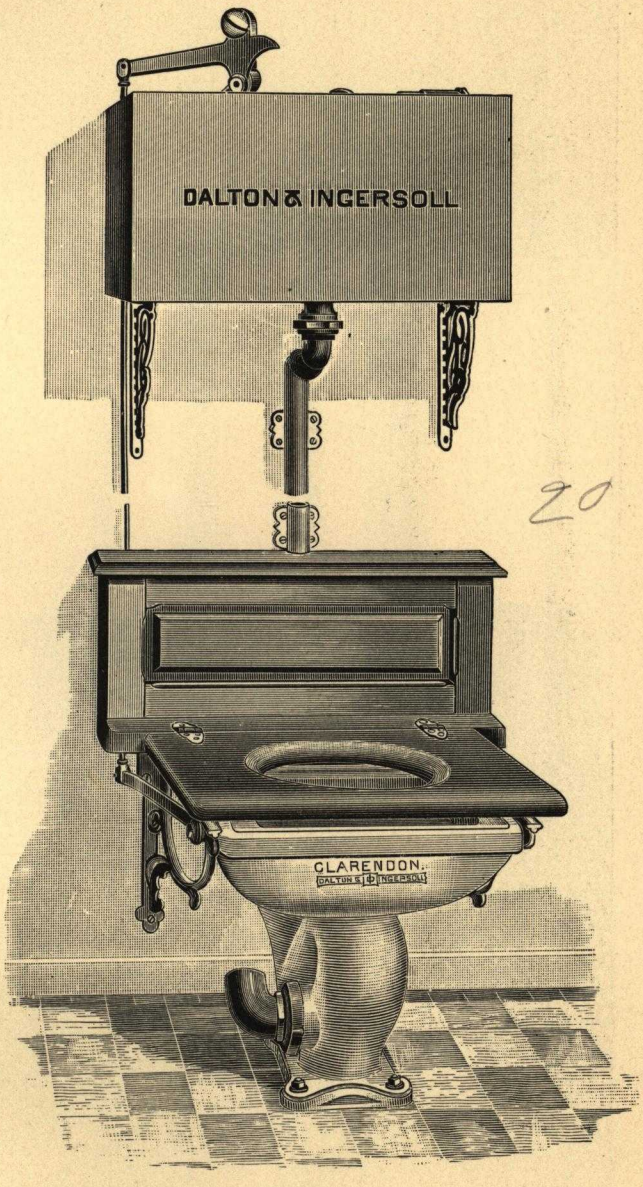


Plate 74.

The Clarendon Hopper Water Closet, No. 3 Fore and After Wash Copper-Lined Cistern, and Brackets, No. 4 Seat on Galvanized Brackets. Seats finished in either Cherry, Ash, Walnut, or Oak. For description of Cistern, see page 20. For price, see page 89.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 38.

The Dartmouth Oval Top Combined Hopper and Trap.

OPERATED BY SEAT.

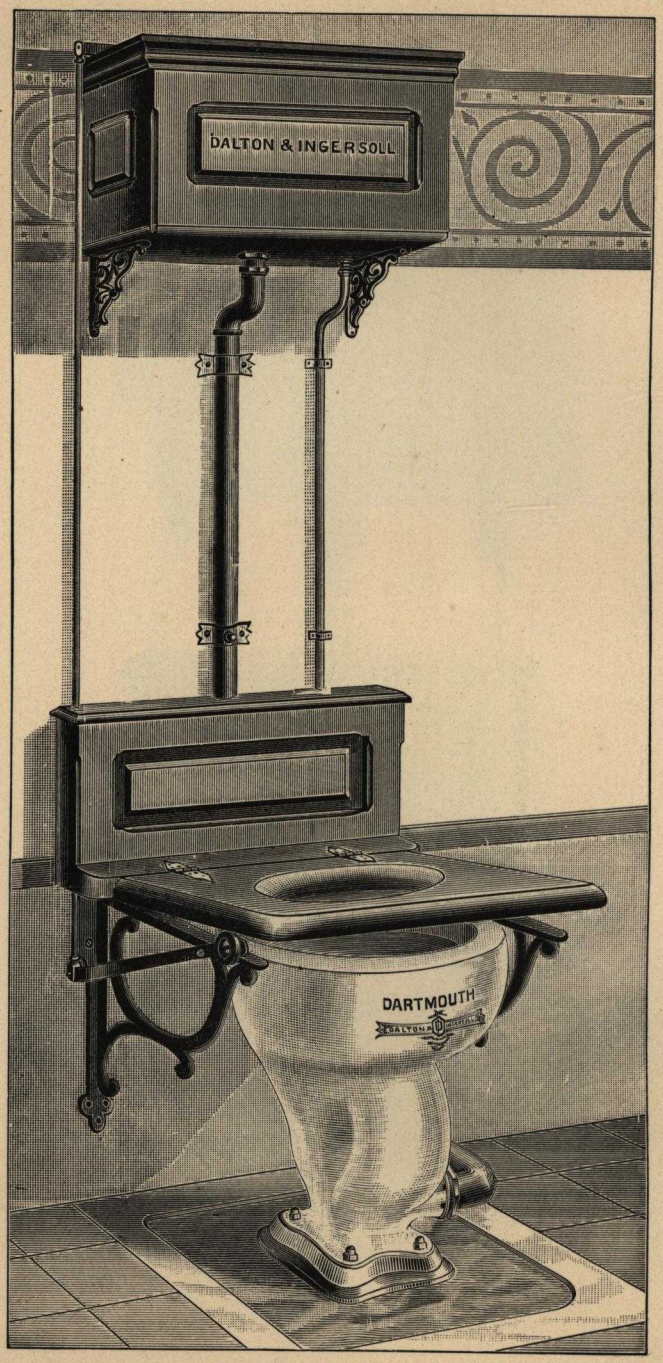


Plate 75.

The Dartmouth Hopper Water Closet, No. 7 Fore and After Wash Copper-Lined Panelled Cistern, No. 4 Seat on Galvanized Brackets, Polished Brass Supply and Flush Pipe, and Connecting Rod. Cistern finished in either Cherry, Ash, Walnut, or Oak. For description of Cistern, see page 20. For price, see page 89.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 39.

The Clarendon Square Top Combined Hopper and Trap.

OPERATED BY PULL AND CHAIN.

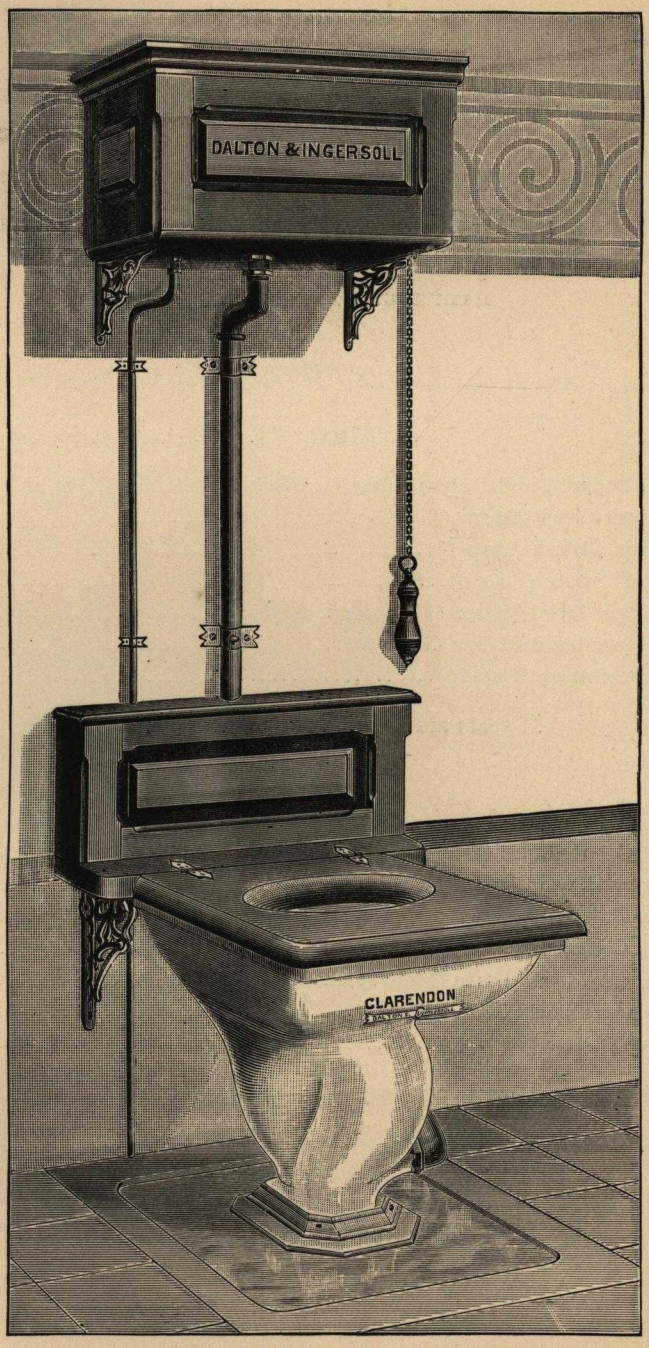


Plate 76.

The Clarendon Hopper Water Closet, with No. 5 Sure-Supply Copper-Lined Panelled Cistern, and Brackets, No. 5 Seat and Brackets, Polished Brass Supply and Flush Pipe. Cistern and Seat finished in either Cherry, Ash, Walnut, or Oak. For description of Cistern, see page 14. For price, see page 89.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 40.

Combined Hoppers and Trap.

DARTMOUTH AND CLARENDON.

Plate 71.

Closet with No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain as shown	$26.00
If with No. 5 Copper-Lined Cistern (Plate 5)	25.00
If with No. 13 Iron Cistern (Plate 7)	21.50
If with No. 9 Iron Cistern (Plate 6)	23.50
If with No. 19 Copper-Lined Cistern (Plate 24)	21.00
If with No. 17 Copper-Lined Cistern (Plate 22)	23.00
If with No. 21 Iron Cistern (Plate 26)	19.25

If seats are desired, see pages 34 to 38.

Plate 72.

Closet with No. 1 Copper-Lined Cistern (Plate 4), Brackets, Pull, and Chain	$28.50
If with No. 5 Copper-Lined Cistern (Plate 5)	27.50
If with No. 13 Iron Cistern (Plate 7)	24.00
If with No. 9 Iron Cistern (Plate 6)	26.00
If with No. 19 Copper-Lined Cistern (Plate 24)	23.50
If with No. 17 Copper-Lined Cistern (Plate 22)	25.50
If with No. 21 Iron Cistern (Plate 26)	21.75

If seats are desired, see pages 34 to 38.

Combined Hoppers and Trap.

DARTMOUTH AND CLARENDON.

Plate 73.

Closet with No. 3 Copper-Lined Cistern (Plate 12), with No. 4 Seat on Galvanized Brackets as shown	$38.00
If with No. 7 Copper-Lined Cistern (Plate 13)	37.00
If with No. 11 Iron Cistern (Plate 14)	36.00
If with No. 15 Iron Cistern (Plate 15)	34.00
If with No. 2 Seat (Plate 32), deduct	1.50

Plate 74.

Closet with No. 3 Copper-Lined Cistern (Plate 12), with No. 4 Seat on Galvanized Brackets as shown	$40.50
If with No. 7 Copper-Lined Cistern (Plate 13)	39.50
If with No. 11 Iron Cistern (Plate 14)	38.50
If with No. 15 Iron Cistern (Plate 15)	36.50
If with No. 2 Seat (Plate 32), deduct	1.50

Plate 75.

Closet with No. 7 Panelled Copper-Lined Cistern (Plate 13), Brass Supply and Flush Pipe, No. 4 Seat on Galvanized Brackets as shown	$58.25
If Clarendon Closet is desired, add	2.50

Plate 76.

Closet with No. 5 Panelled Copper-Lined Cistern (Plate 5), Brass Supply and Flush Pipe, No. 5 Seat and Brackets as shown	$52.75
If Dartmouth Closet is desired, deduct	2.50

Improved Flushing-Rim Short Oval Earthenware Hopper and Earthenware Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

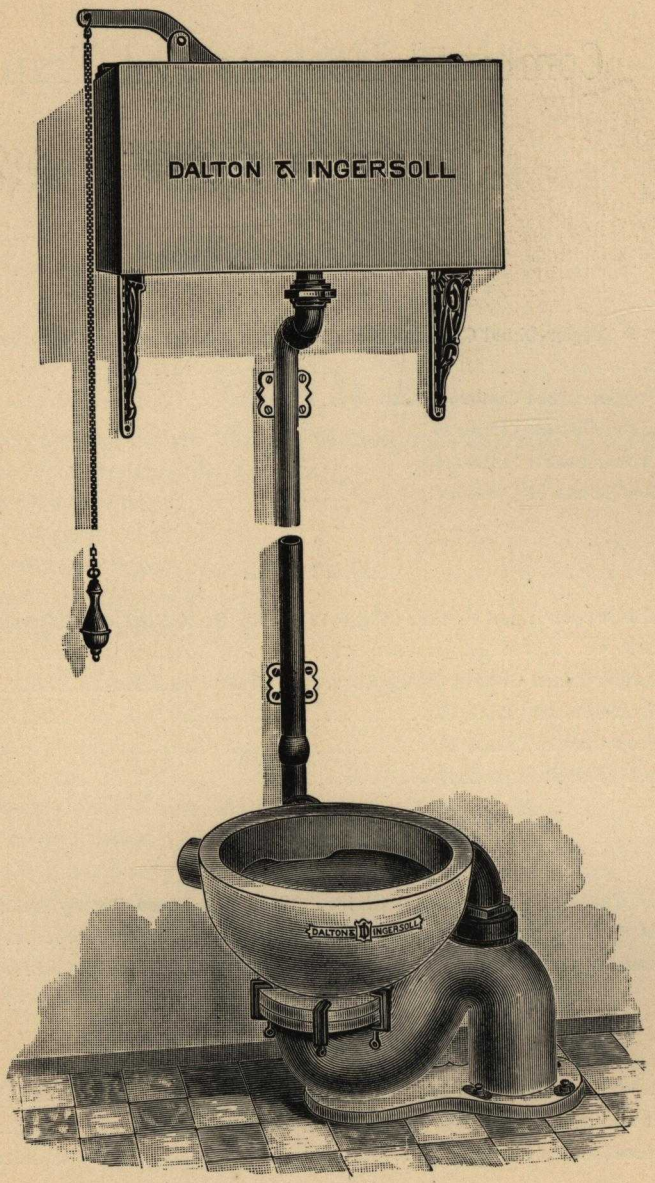


Plate 77.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown $21.00

Can also be furnished as follows:

Complete, with No. 5 Copper-Lined Cistern (Plate 5) 20.00
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22) 18.00
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23) 16.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24) 16.00
Add for Brass Floor Flange..... 2.00. If without Vent on Bowl, deduct..... .25

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 41.

Improved Flushing-Rim Short Square Earthenware Hopper and Earthenware Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

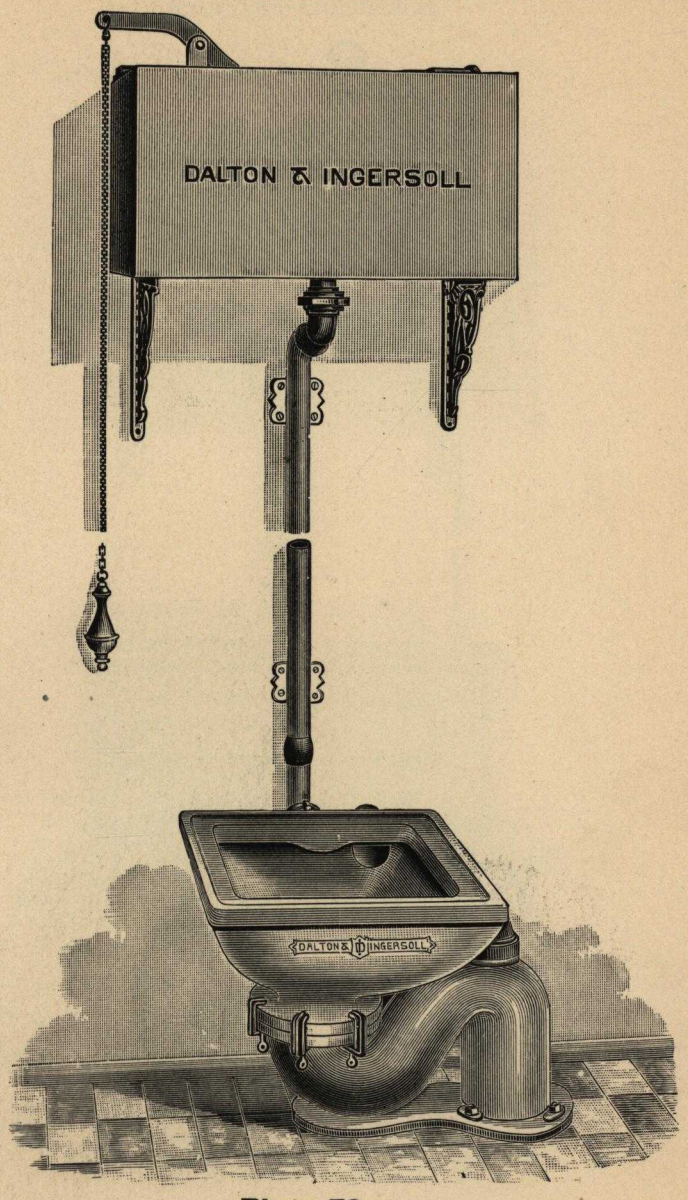


Plate 78.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown	$23.00
Can also be furnished as follows:	
Complete, with No. 5 Copper-Lined Cistern (Plate 5)	22.00
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22)	20.00
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23)	18.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24)	18.00
Add for Brass Floor Flange	2.00
If without Vent on Bowl, deduct	.25

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 42.

Improved Flushing-Rim Short Oval Earthenware Hopper and Earthenware Trap.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN, AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

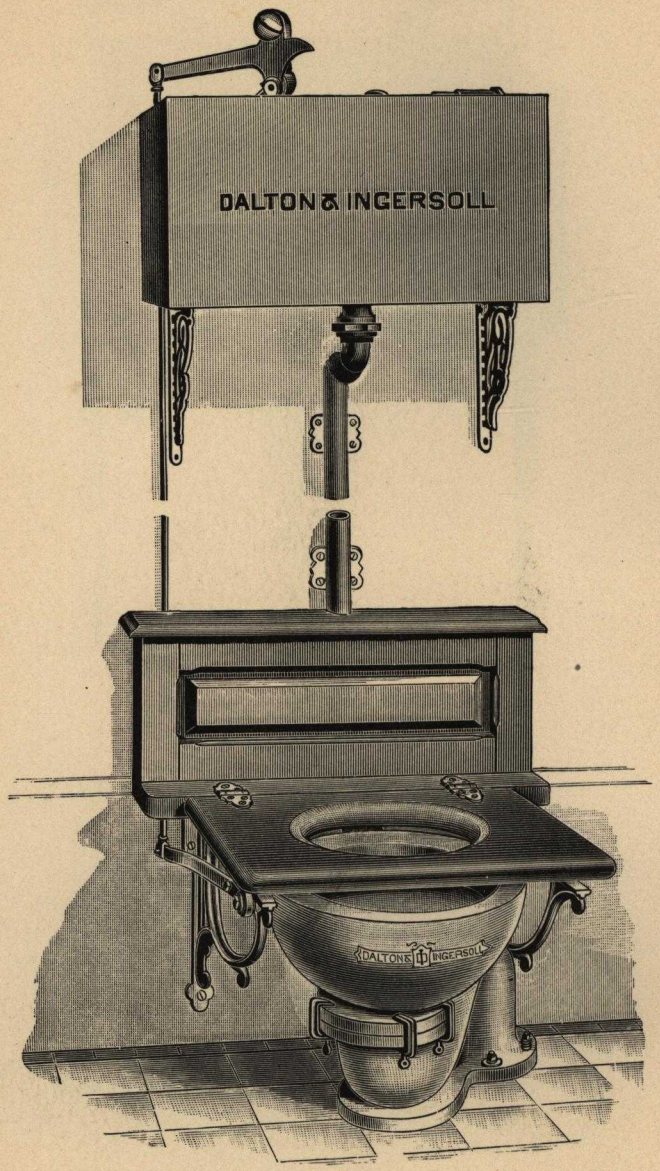


Plate 79.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown..... $33.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$31.50	$30.50
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$32.00	30.50	29.50
Add for Brass Floor Flange.....	2.00	If without Vent on Bowl, deduct.....	.25

For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 43.

Improved Flushing-Rim Short Square Earthenware Hopper and Earthenware Trap.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

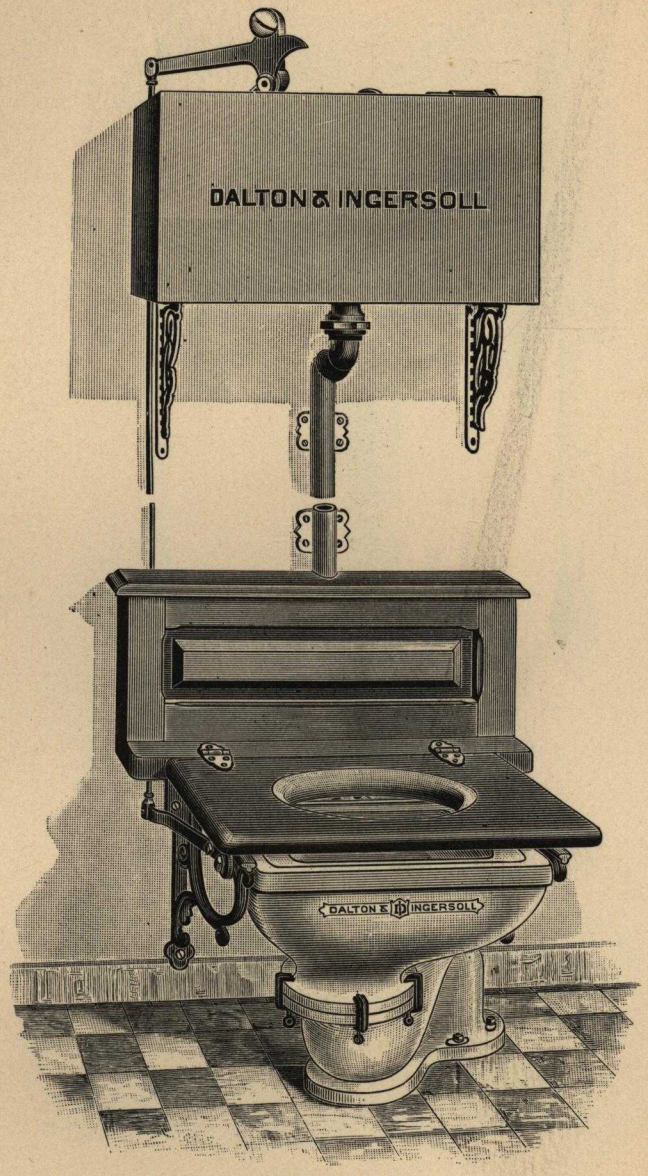


Plate 80.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown..... $35.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$33.50	$32.50
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$34.00	32.50	31.50
Add for Brass Floor Flange..... 2.00	If without Vent on Bowl, deduct....		.25

For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 44.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Lead Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

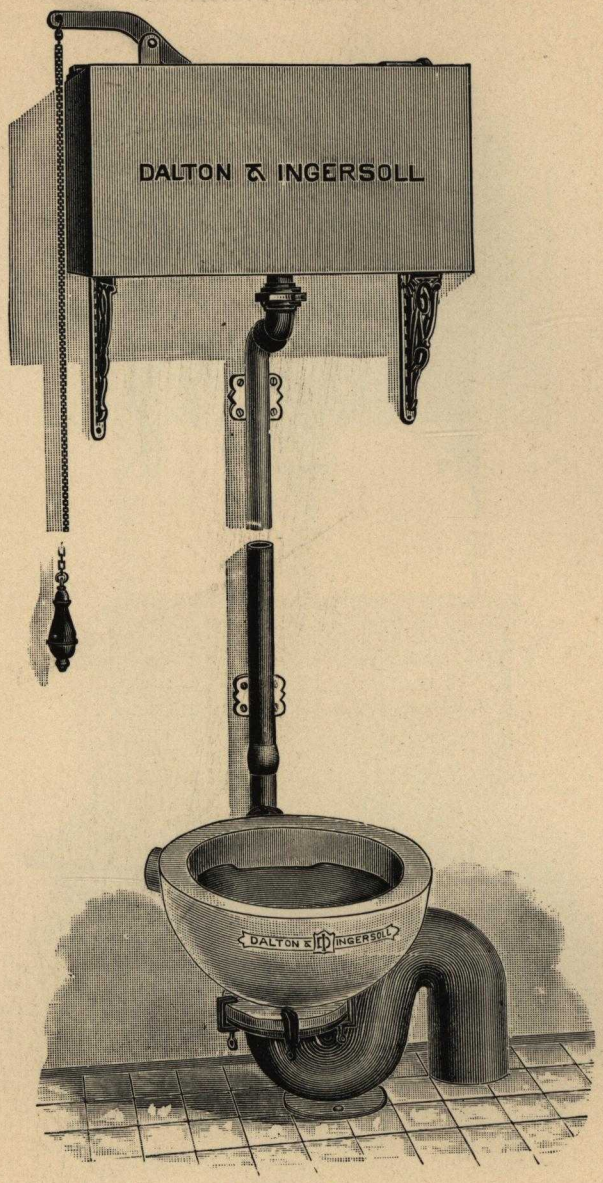


Plate 81.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown	$21.50
Can also be furnished as follows:	
Complete, with No. 5 Copper-Lined Cistern (Plate 5)	20.50
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22)	18.50
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23)	17.00
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24)	16.50
If without Vent on Bowl, deduct	.25

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 45.

Improved Flushing-Rim Short Square Earthenware Hopper and S Lead Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

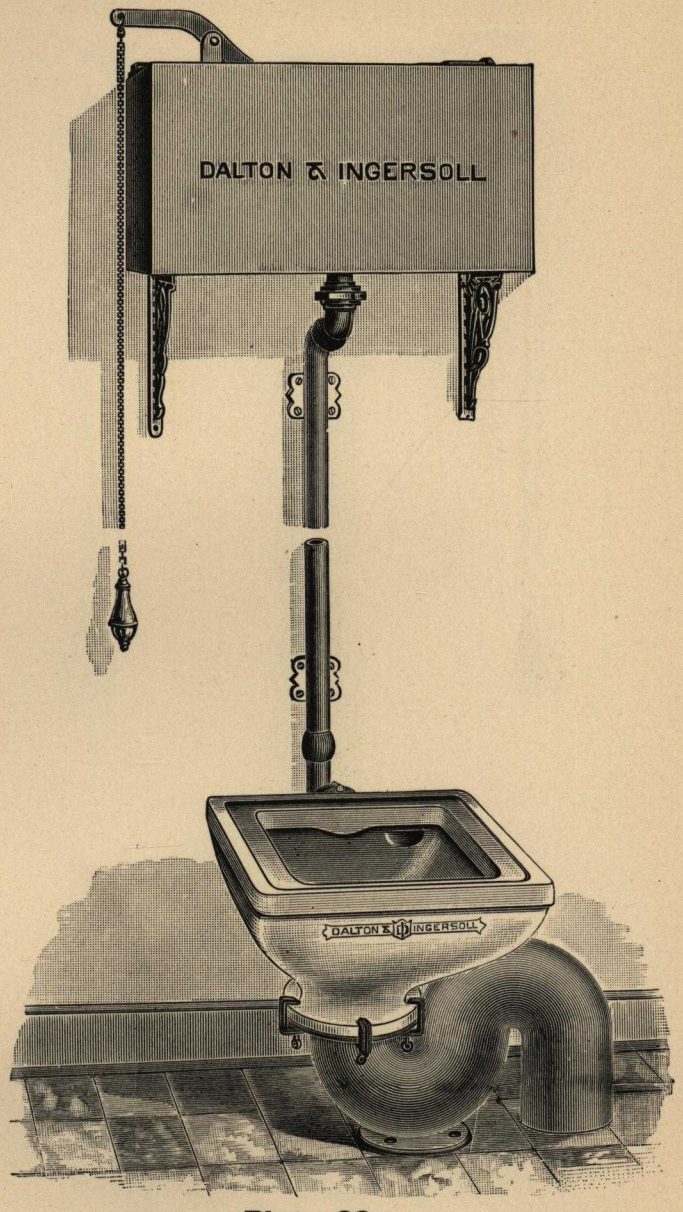


Plate 82.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown	$23.50
Can also be furnished as follows:	
Complete, with No. 5 Copper-Lined Cistern (Plate 5)	22.50
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22)	20.50
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23)	19.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24)	18.50
If without Vent on Bowl, deduct	.25

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 46.

Improved Flushing-Rim Short Oval Earthenware Hopper and Lead Trap.

WITH NO. 13 SURE-SUPPLY IRON CISTERN.

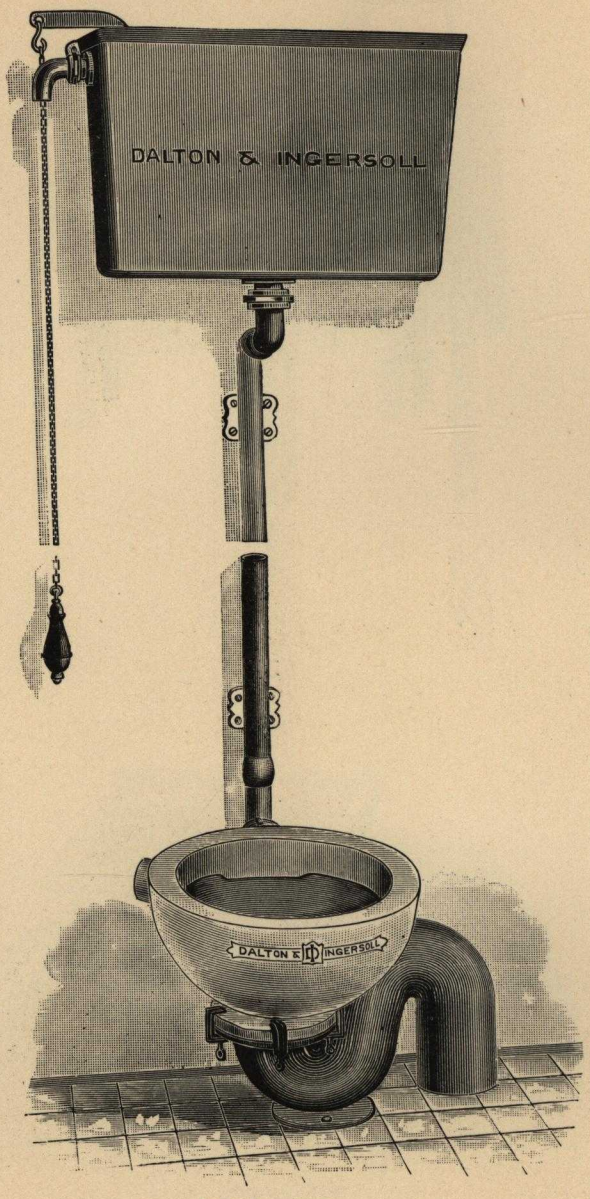


Plate 83.

Complete, with No. 13 Iron Cistern (Plate 7) as shown	$17.00
Can also be furnished as follows:	
Complete, with No. 9 Iron Cistern (Plate 6)	19.00
Complete, with No. 20 I.S. Iron Cistern (Plate 25)	16.50
Complete, with No. 21 I.S. Iron Cistern (Plate 26)	14.75
If without Vent on Bowl, deduct	.25

If Seats are desired, see pages 34 to 38. Also furnished with ¾ or ½ S Trap.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 47.

Improved Flushing-Rim Short Square Earthenware Hopper and Lead Trap.

WITH NO. 13 SURE-SUPPLY IRON CISTERN.

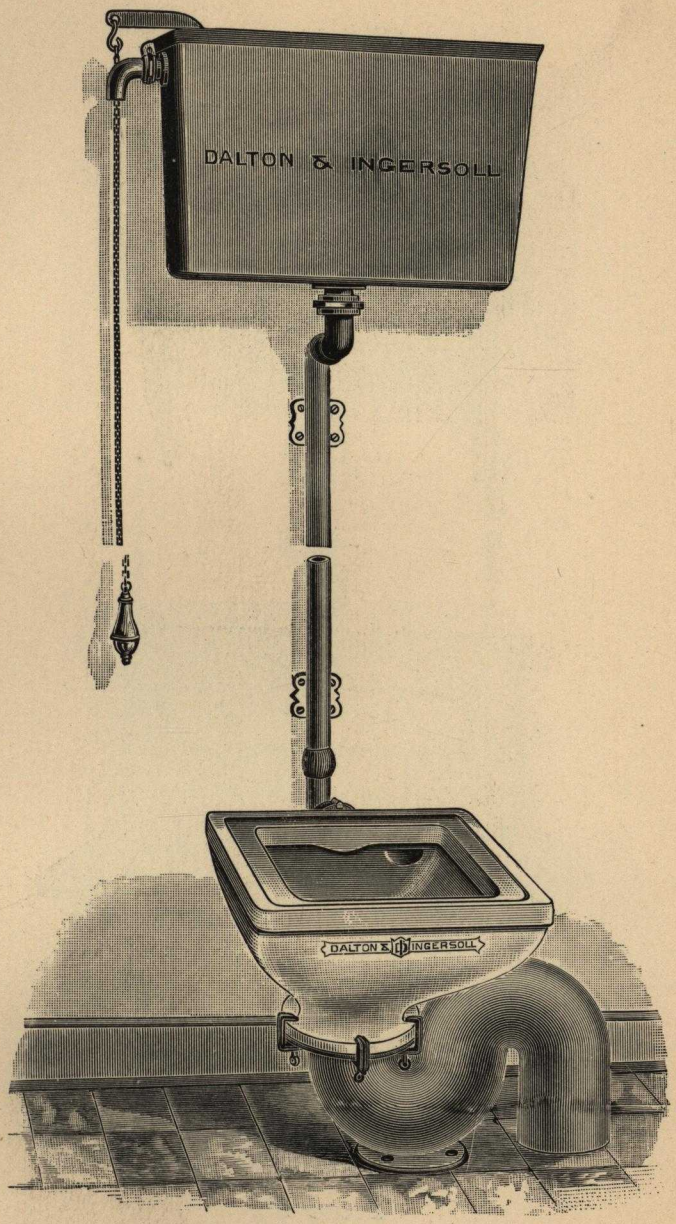


Plate 84.

Complete, with No. 13 Iron Cistern (Plate 7) as shown	$19.00
Can be furnished as follows:	
Complete, with No. 9 Iron Cistern (Plate 6)	21.00
Complete, with No. 20 I.S. Iron Cistern (Plate 25)	18.50
Complete, with No. 21 I.S. Iron Cistern (Plate 26)	16.75
If without Vent on Bowl, deduct	.25

If Seats are desired, see pages 34 to 38. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 48.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Lead Trap.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

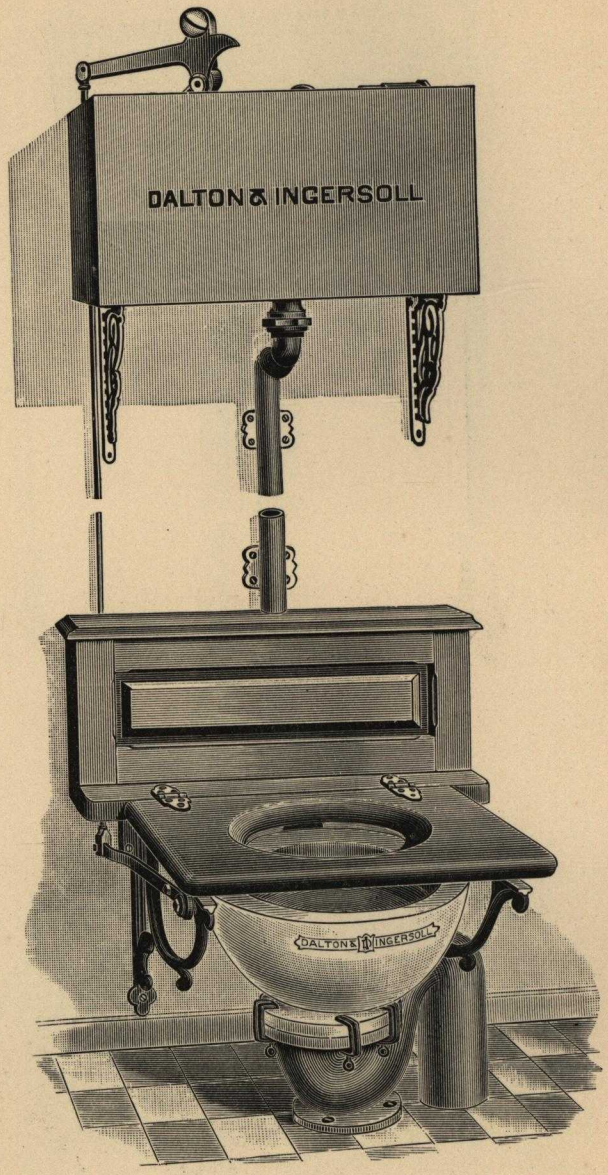


Plate 85.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown $33.50

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$32.00	$31.00
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$32.50	31.00	30.00
If without Vent on Bowl, deduct			.25

Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 49.

Improved Flushing-Rim Short Square Earthenware Hopper and S Lead Trap.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

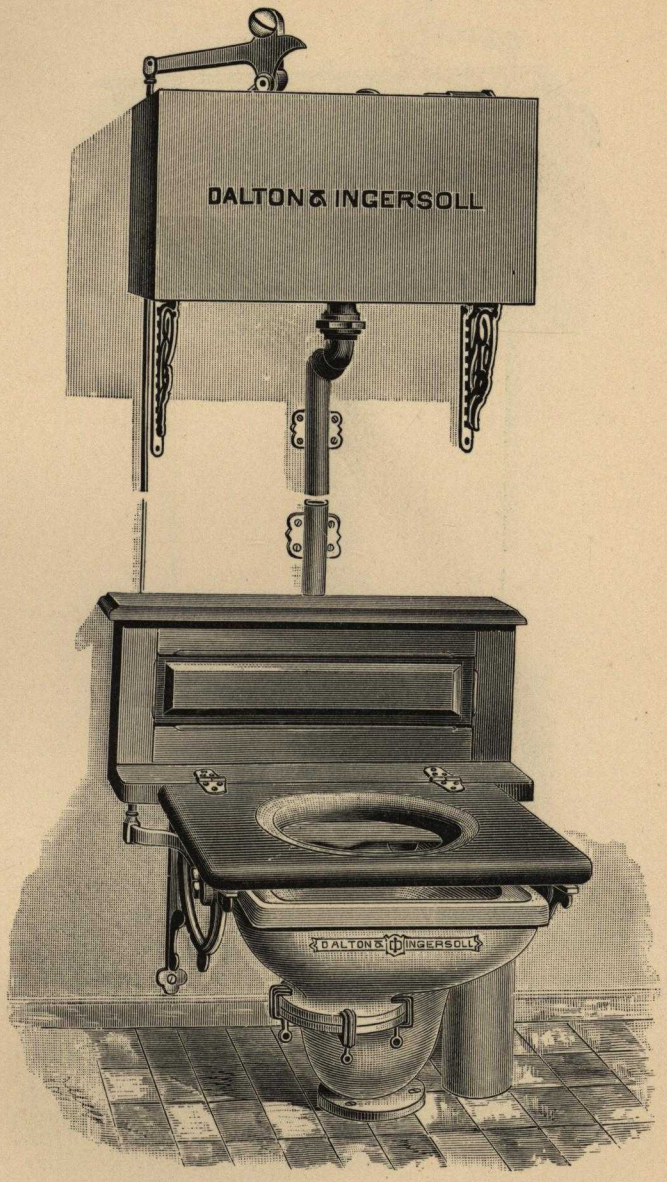


Plate 86.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown..... ..... $35.50

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$34.00	$33.00
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$34.50	33.00	32.00
If without Vent on Bowl, deduct.....			.25

Also furnished with ¾ or ½ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 50.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Lead Trap.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

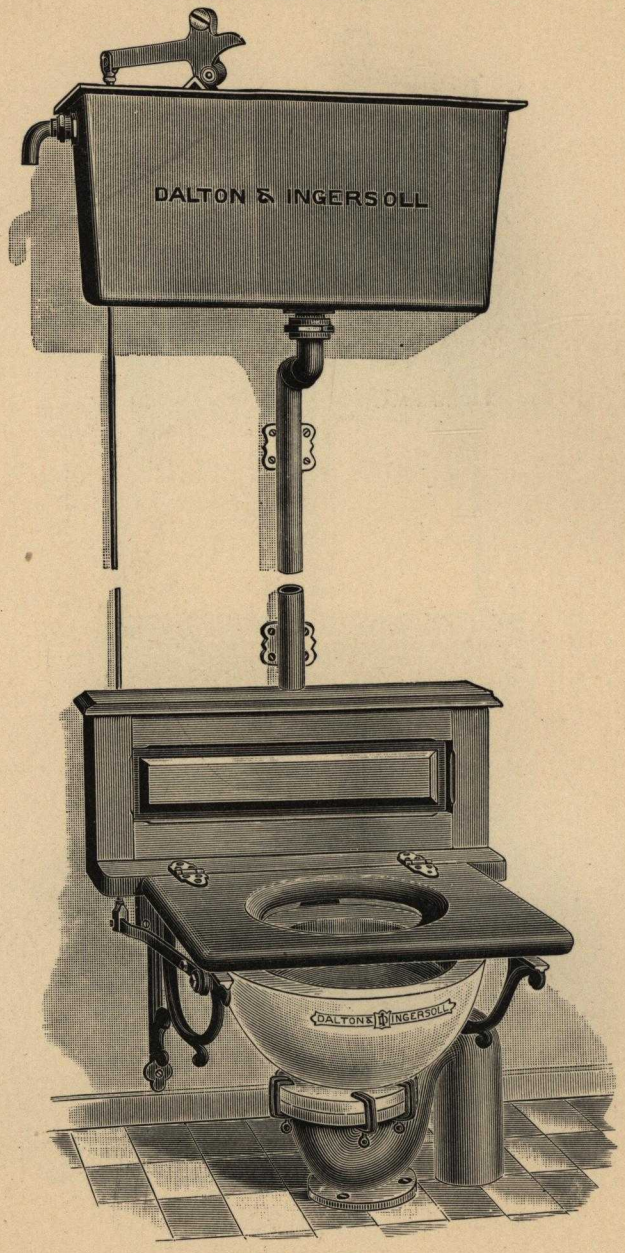


Plate 87.

Complete, with No. 11 Iron Cistern (Plate 14) as shown $31.50

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14).....		$30.00	$29.00
Complete, with No. 15 Iron Cistern (Plate 15).....	$30.50	29.00	28.00
If without Vent on Bowl, deduct			.25

Also furnished with ¾ or ½ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 51.

Improved Flushing-Rim Short Square Earthenware Hopper and S Lead Trap.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

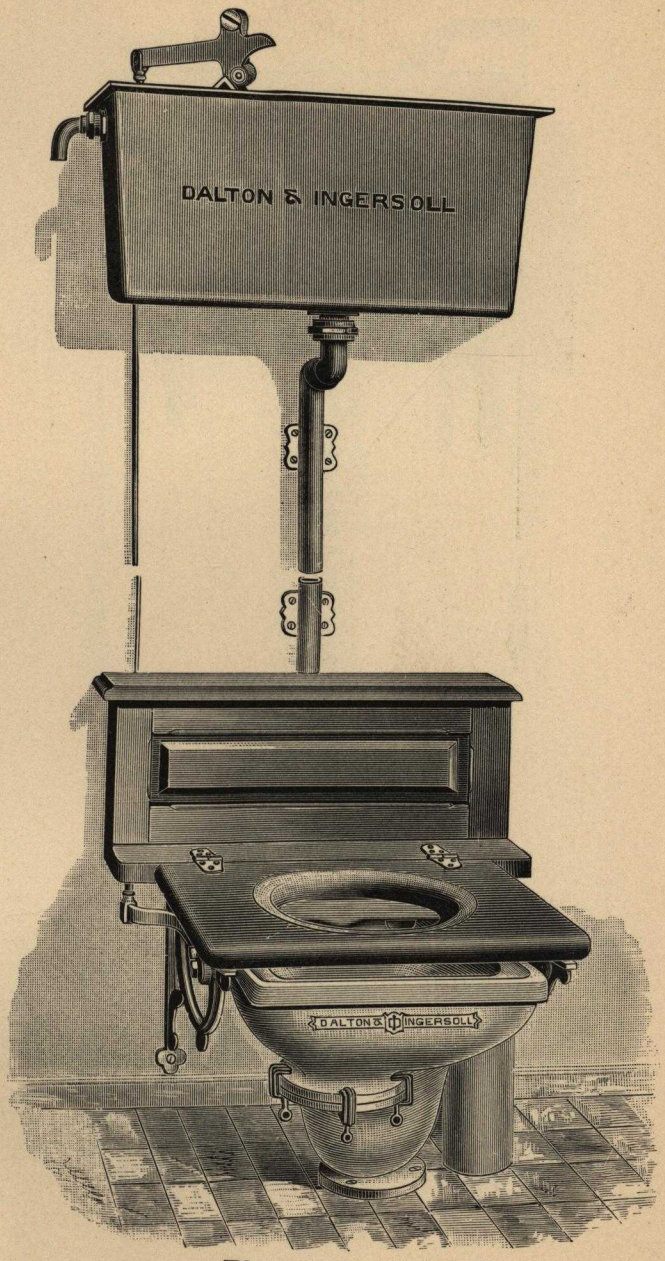


Plate 88.

Complete, with No. 11 Iron Cistern (Plate 14) as shown $33.50

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14)		$32.00	$31.00
Complete, with No. 15 Iron Cistern (Plate 15)	$32.50	31.00	30.00
If without Vent on Bowl, deduct			.25

Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 52.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Enamelled Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

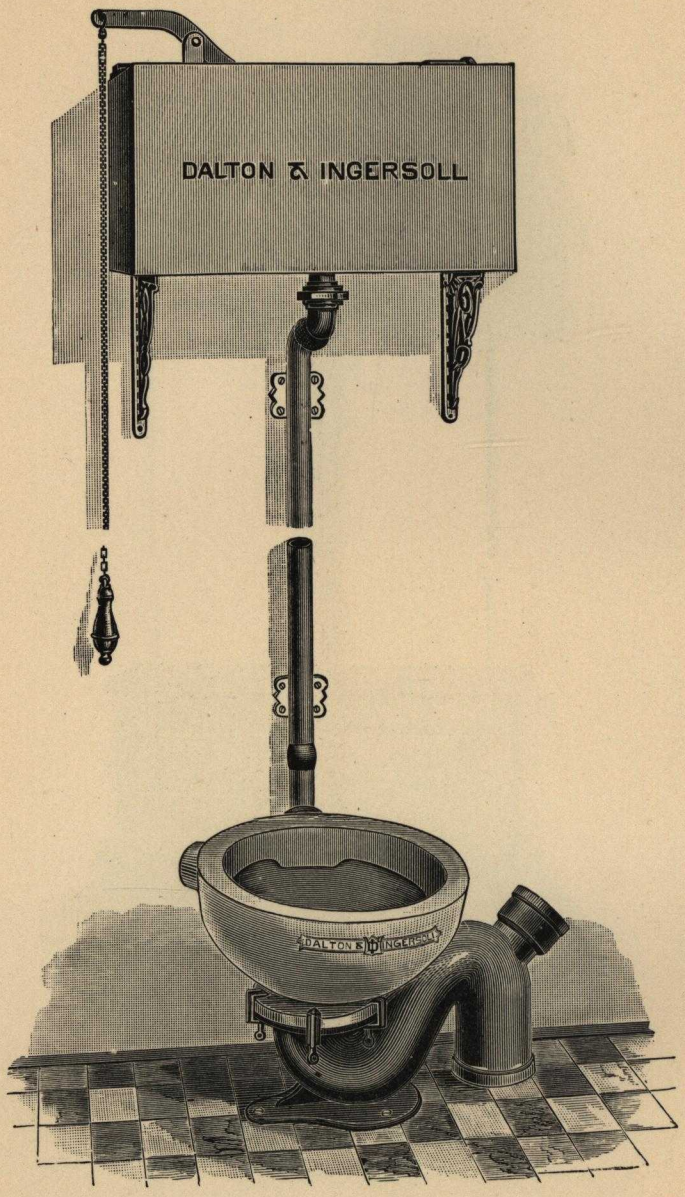


Plate 89.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown $20.00

Can also be furnished as follows:

Complete, with No. 5 Copper-Lined Cistern (Plate 5) 19.00
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22) 17.00
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23) 15.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24) 15.00
If without Vent on Bowl, deduct..... .25 If Trap not enamelled, deduct 1.00

If Seats are desired, see pages 34 to 38. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 53.

Improved Flushing-Rim Short Square Earthenware Hopper and S Enamelled Trap.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

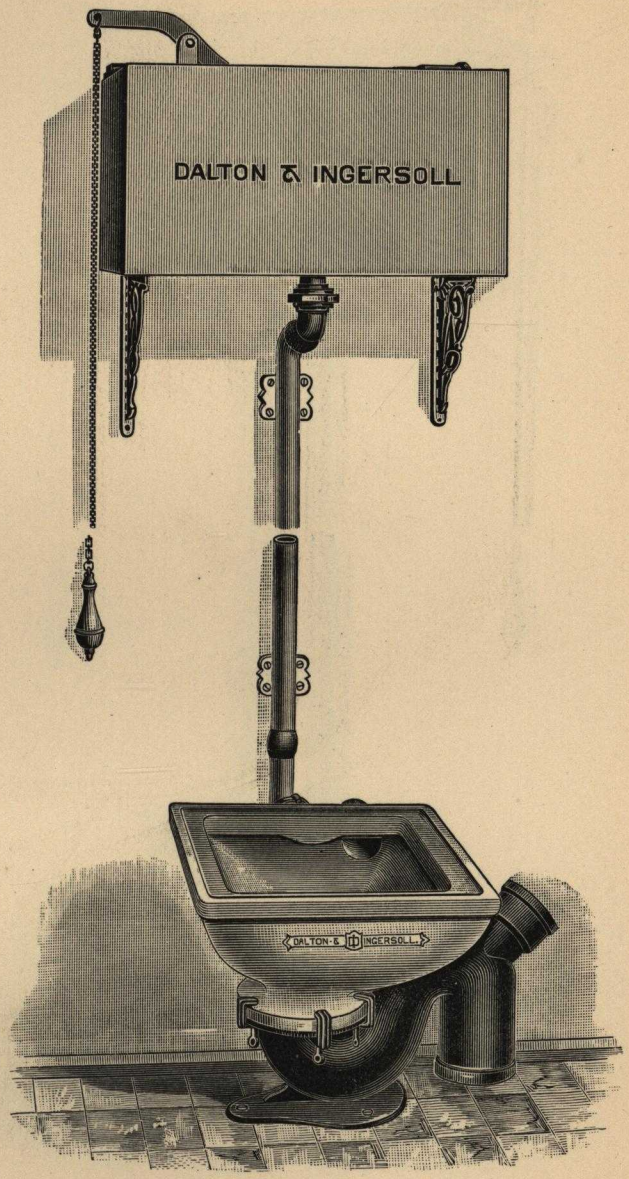


Plate 90.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown $22.00

Can also be furnished as follows:

Complete, with No. 5 Copper-Lined Cistern (Plate 5) 21.00
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22) 19.00
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23) 17.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24) 17.00
If without Vent on Bowl, deduct ..... .25 If Trap not enamelled, deduct 1.00

If Seats are desired, see pages 34 to 38. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 54.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 13 SURE-SUPPLY IRON CISTERN.

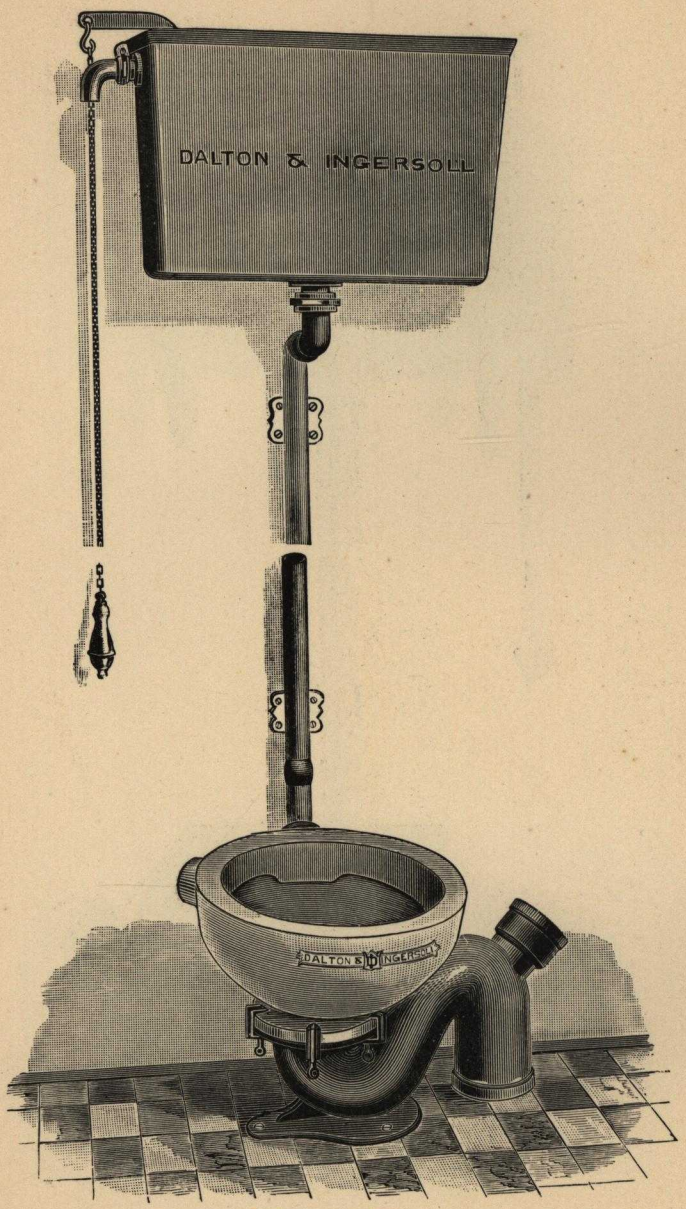


Plate 91.

Complete, with No. 13 Iron Cistern (Plate 7) as shown $15.50

Can also be furnished as follows:

Complete, with No. 9 Iron Cistern (Plate 6) 17.50
Complete, with No. 20 I.S. Iron Cistern (Plate 25) 15.00
Complete, with No. 21 I.S. Iron Cistern (Plate 26) 13.25
If without Vent on Bowl, deduct ..... .25 If Trap is not enamelled, deduct..... 1.00

If Seats are desired, see pages 34 to 38. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 55.

Improved Flushing-Rim Short Square Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 13 SURE-SUPPLY COPPER-LINED CISTERN.

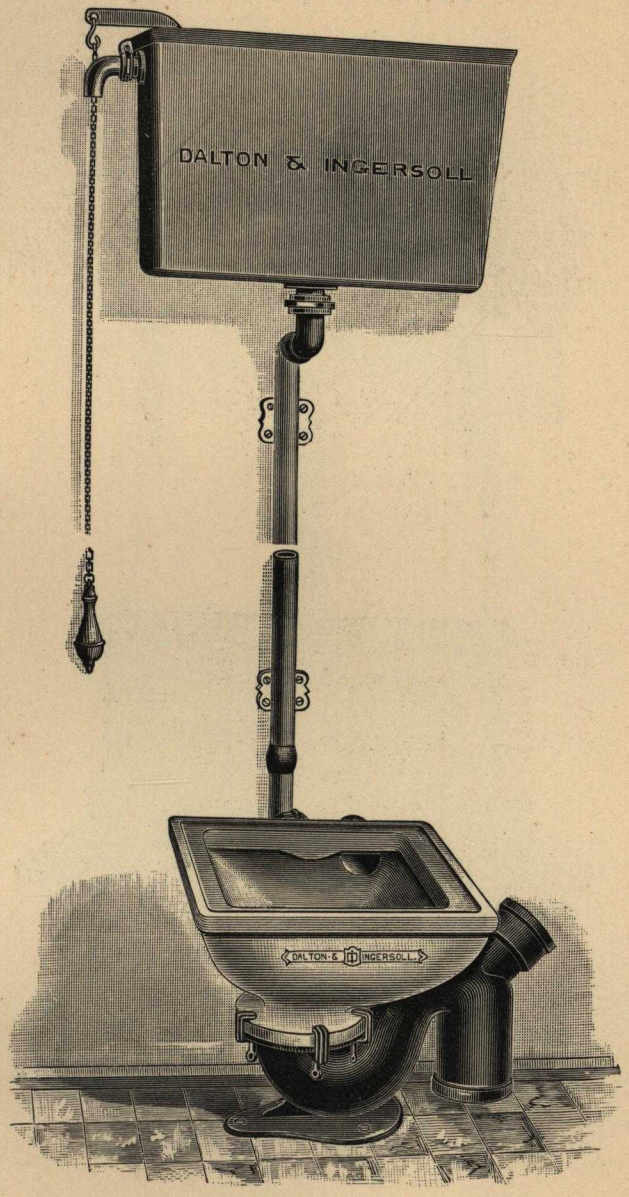


Plate 92.

Complete, with No. 13 Iron Cistern (Plate 7) as shown $17.50
Can also be furnished as follows:
Complete, with No. 9 Iron Cistern (Plate 6) 19.50
Complete, with No. 20 I.S. Iron Cistern (Plate 25) 17.00
Complete, with No. 21 I.S. Iron Cistern (Plate 26) 15.25
If without Vent on Bowl, deduct ..... .25 If Trap is not enamelled, deduct 1.00

If Seats are desired, see pages 34 to 38. Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 56.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 3 FORE AND AFTER WASH COPPER-LINED CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

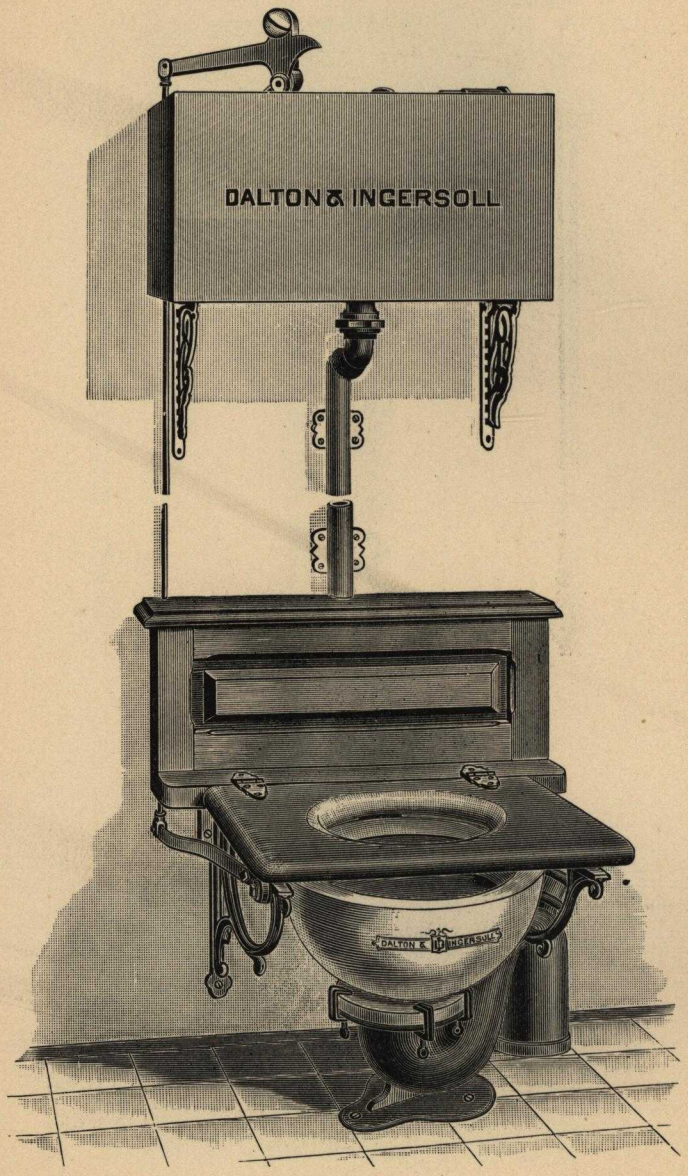


Plate 93.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown..... $32.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$30.50	$29.50
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$31.00	29.50	28.50
If without Vent on Bowl, deduct.....	.25	If Trap is not enamelled, deduct.....	1.00

Also furnished with ¾ or ½ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 57.

Improved Flushing-Rim Short Square Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

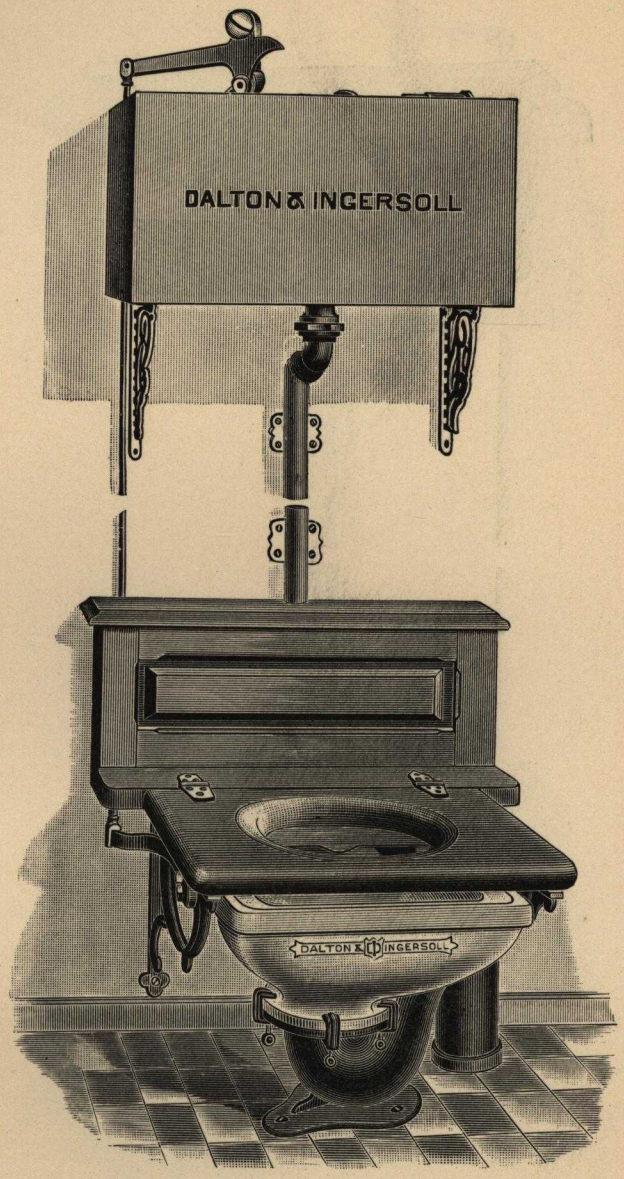


Plate 94.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown $34.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)		$32.50	$31.50
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$33.00	31.50	30.50

If without Vent on Bowl, deduct ..... .25 If Trap is not enamelled, deduct.... 1.00

Also furnished with ¾ or ½ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 58.

Improved Flushing-Rim Short Oval Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN, AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

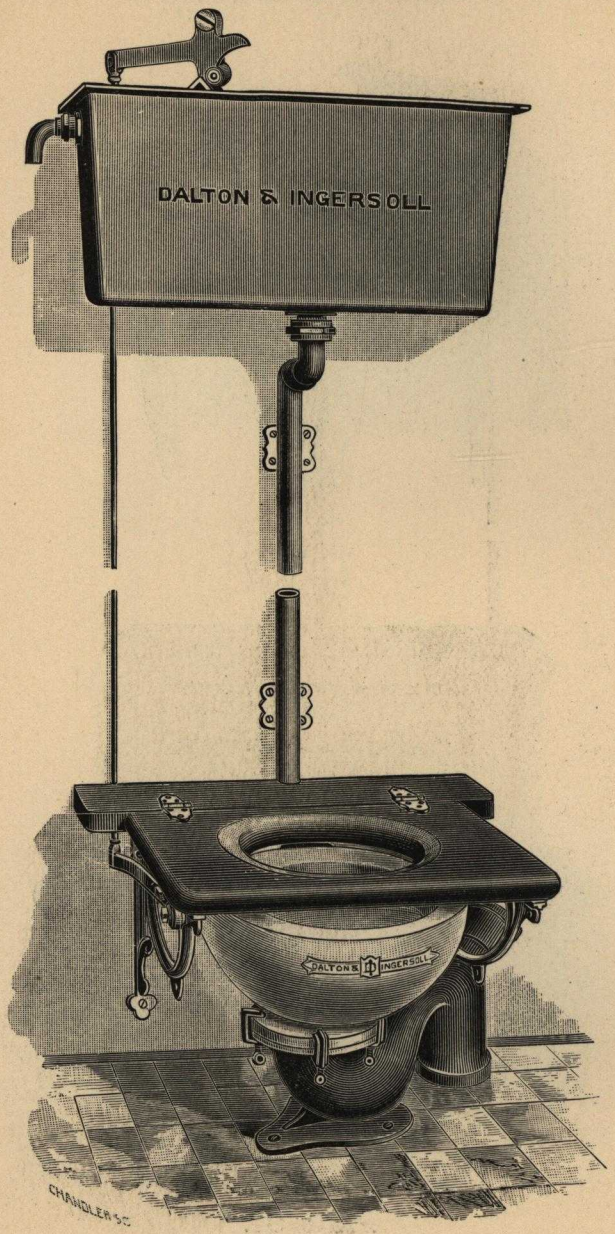


Plate 95.

Complete, with No. 11 Iron Cistern (Plate 14) as shown..... ..... $29.25

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14).....		$27.75	$26.75
Complete, with No. 15 Iron Cistern (Plate 15).....	$28.25	26.75	25.75
If without Vent on Bowl, deduct..... .25	If Trap is not enamelled, deduct....		1.00

Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 59.

Improved Flushing-Rim Short Square Earthenware Hopper and S Enamelled Iron Trap.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

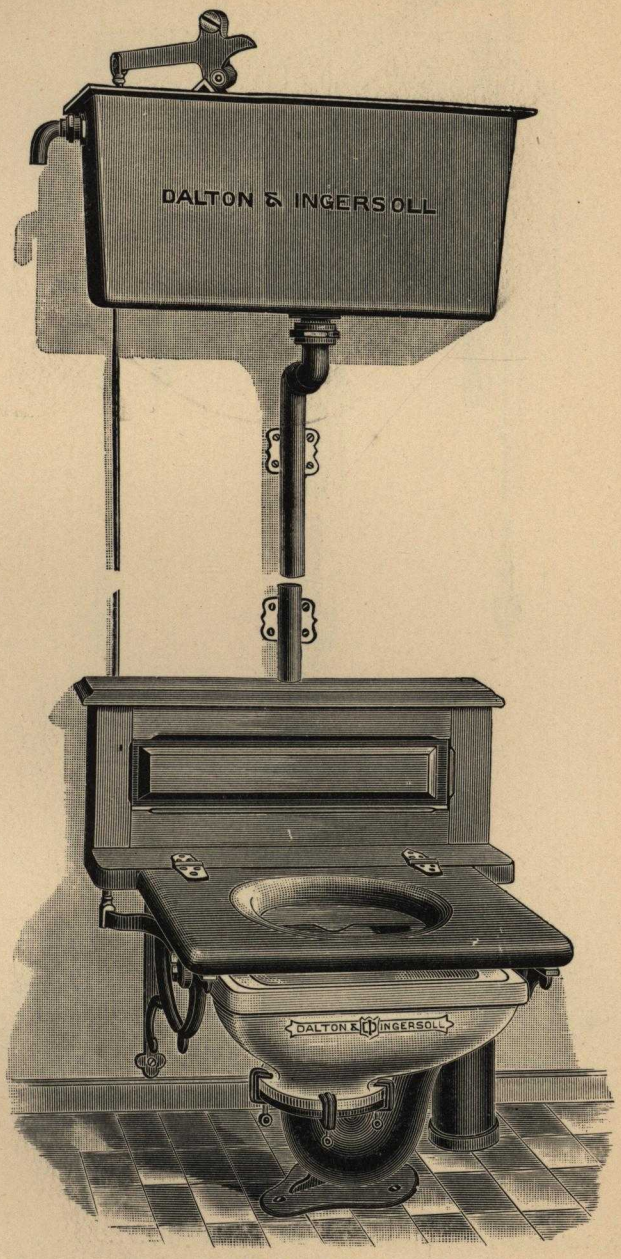


Plate 96.

Complete, with No. 11 Iron Cistern (Plate 14) as shown $32.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14)		$30.50	$29.50
Complete, with No. 15 Iron Cistern (Plate 15)	$31.00	29.50	28.50
If without Vent on Bowl, deduct	.25	If Trap is not enamelled, deduct	1.00

Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 60.

Improved Flushing-Rim Tall Oval Earthenware Hopper.

WITH NO. 1 SURE-SUPPLY COPPER-LINED CISTERN.

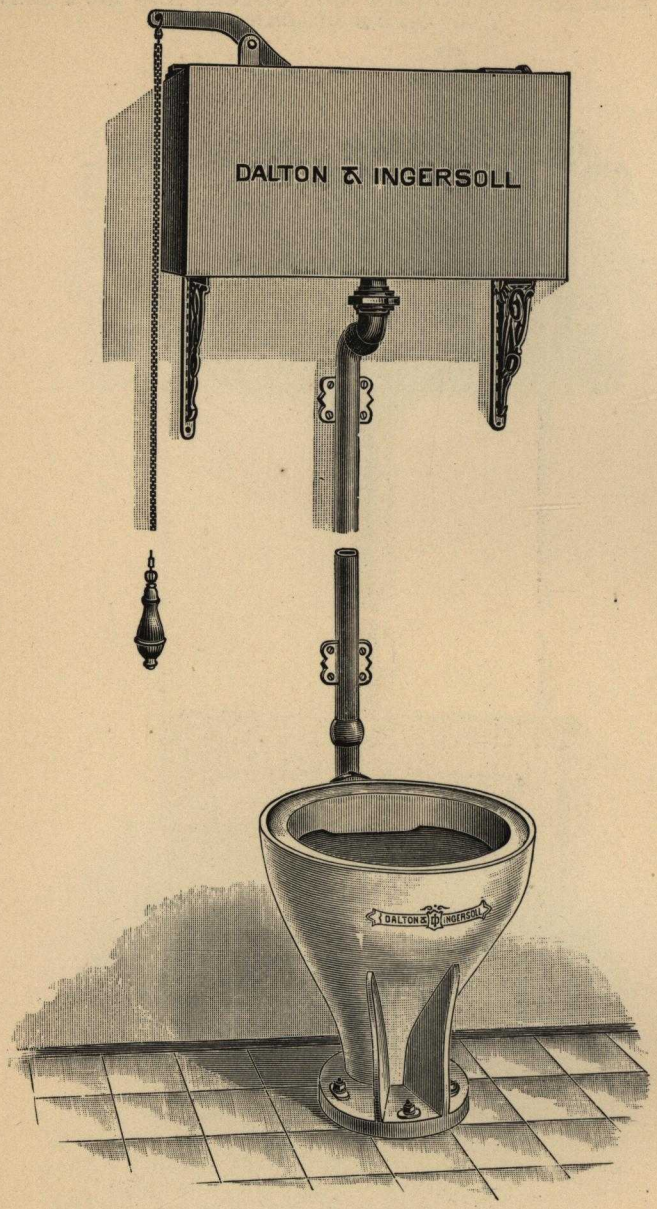


Plate 97.

Complete, with No. 1 Copper-Lined Cistern (Plate 4) as shown	$21.00
Can also be furnished as follows:	
Complete, with No. 5 Copper-Lined Cistern (Plate 5)	20.00
Complete, with No. 17 I.S. Copper-Lined Cistern (Plate 22)	18.00
Complete, with No. 18 I.S. Copper-Lined Cistern (Plate 23)	16.50
Complete, with No. 19 I.S. Copper-Lined Cistern (Plate 24)	16.00
Add for Vent on Hopper	.50

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 61.

Improved Flushing-Rim Tall Oval Earthenware Hopper.

WITH NO. 13 SURE-SUPPLY IRON CISTERN.

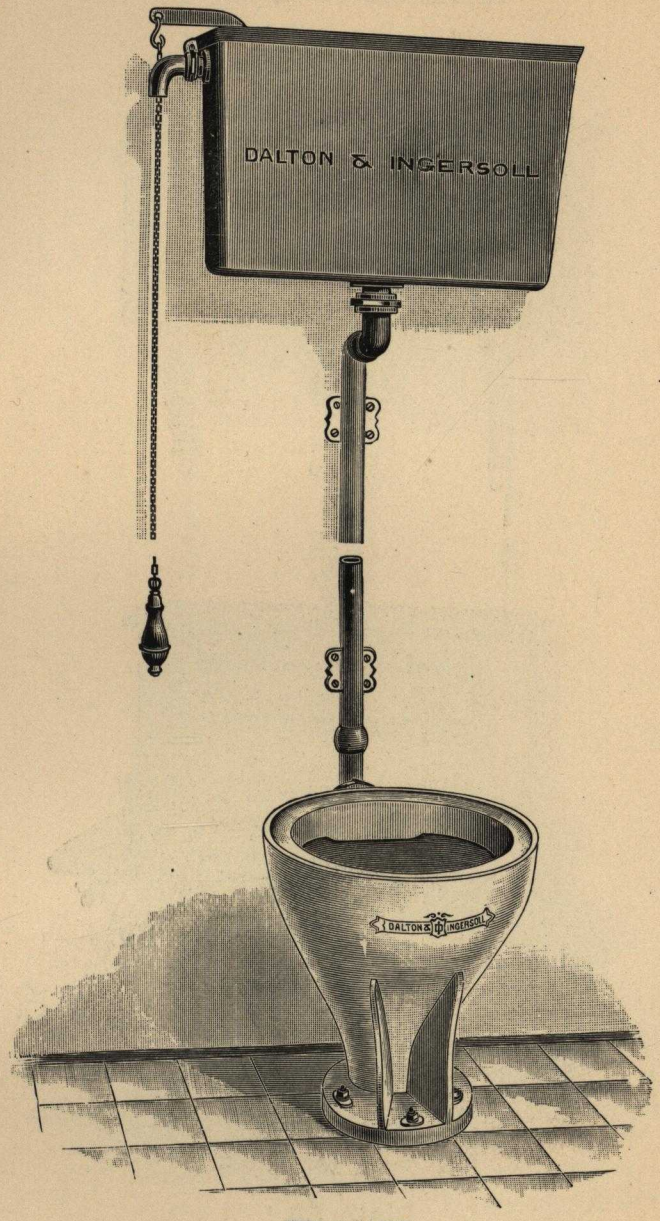


Plate 98.

Complete, with No. 13 Iron Cistern (Plate 7) as shown	$16.50
Can also be furnished as follows:	
Complete, with No. 9 Iron Cistern (Plate 6)	17.50
Complete, with No. 20 I.S. Iron Cistern (Plate 25)	16.00
Complete, with No. 21 I.S. Iron Cistern (Plate 26)	14.25
Add for Vent on Hopper	.50

If Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 62.

Improved Flushing-Rim Tall Oval Earthenware Hopper.

WITH NO. 3 FORE AND AFTER-WASH COPPER-LINED CISTERN AND NO. 4 SEAT ON GALVANIZED BRACKETS.

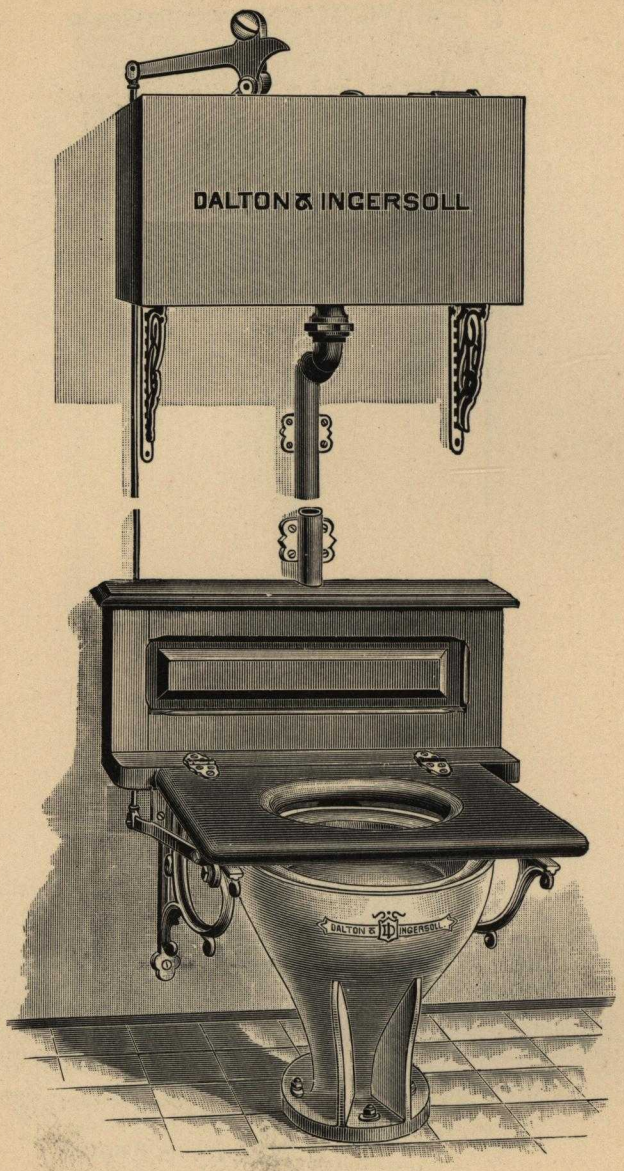


Plate 99.

Complete, with No. 3 Copper-Lined Cistern (Plate 12) as shown..... $33.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 3 Copper-Lined Cistern (Plate 12)....		$31.50	$30.50
Complete, with No. 7 Copper-Lined Cistern (Plate 13)....	$32.00	30.50	29.50
Add for Vent on Hopper.....			.50

For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 63.

Improved Flushing-Rim Tall Oval Earthenware Hopper.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN AND NO. 4 SEAT WITH GALVANIZED BRACKETS.

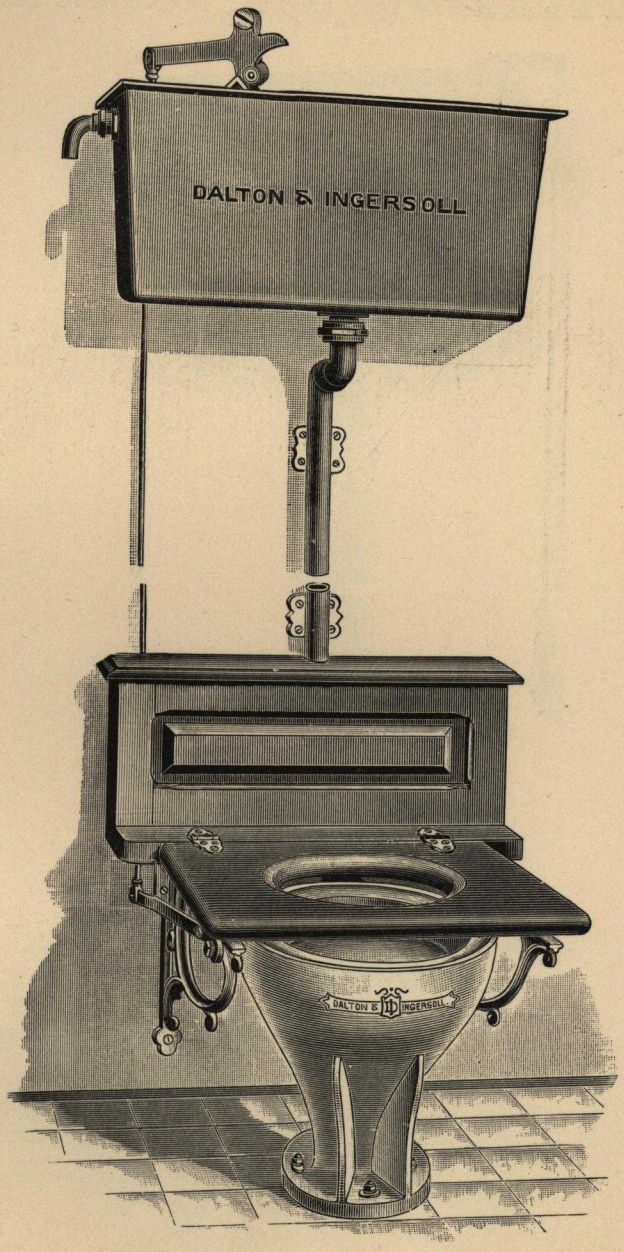


Plate 100.

Complete, with No. 11 Iron Cistern (Plate 14) as shown..... $31.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14).....		$29.50	$28.50
Complete, with No. 15 Iron Cistern (Plate 15).....	$30.00	28.50	27.50
Add for Vent on Hopper.....			.50

For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 64.

Flushing-Rim Short Oval Enamelled Iron Hopper with S Enamelled Iron Trap.

WITH NO. 13 SURE-SUPPLY IRON CISTERN. WOOD RIM ON HOPPER.

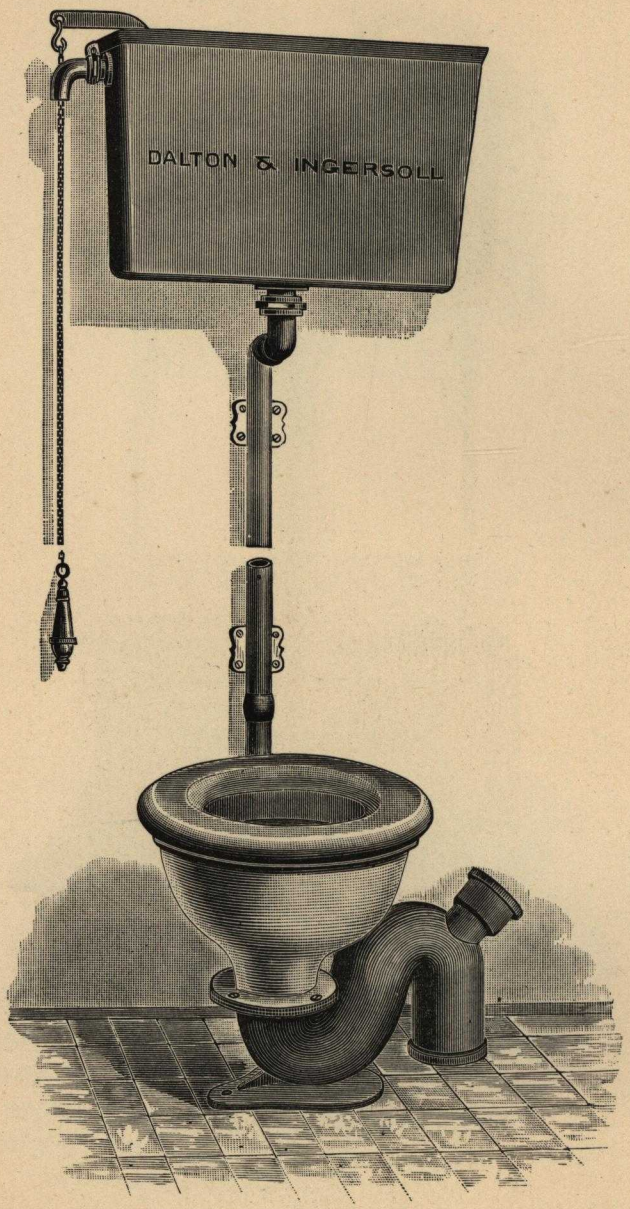


Plate 101.

Complete, with No. 13 Iron Cistern (Plate 7) as shown $17.00

Can also be furnished as follows:

Complete, with No. 9 Iron Cistern (Plate 6) 19.00
Complete, with No. 20 I.S. Iron Cistern (Plate 25) 16.50
Complete, with No. 21 I.S. Iron Cistern (Plate 26) 14.75
If without Wood Rim, deduct..... 1.50 If Trap is not enamelled, deduct..... 1.00

Also furnished with ¾ or ½ S Trap. If other Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 65.

Flushing-Rim Short Oval Enamelled Iron Hopper and S Enamelled Iron Trap.

WITH NO. 11 FORE AND AFTER WASH IRON CISTERN AND NO. 4 SEAT ON GALVANIZED BRACKETS.

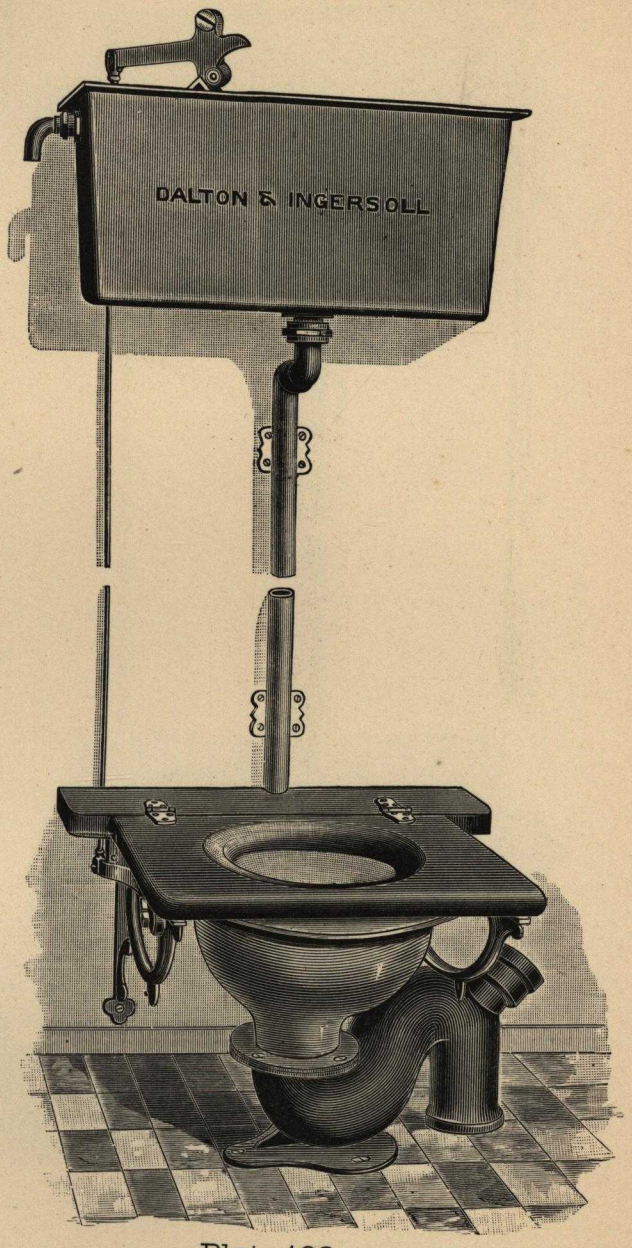


Plate 102.

Complete, with No. 11 Iron Cistern (Plate 14) as shown..... $30.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14).....		$28.50	$27.50
Complete, with No. 15 Iron Cistern (Plate 15).....	$29.00	27.50	26.50
If Trap is not enamelled, deduct.....			1.00

Also furnished with $\frac{3}{4}$ or $\frac{1}{2}$ S Trap. For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 66.

Flushing-Rim Tall Oval Enamelled Iron Hopper.

WITH NO. 13 SURE-SUPPLY IRON CISTERN. WOOD RIM ON HOPPER.

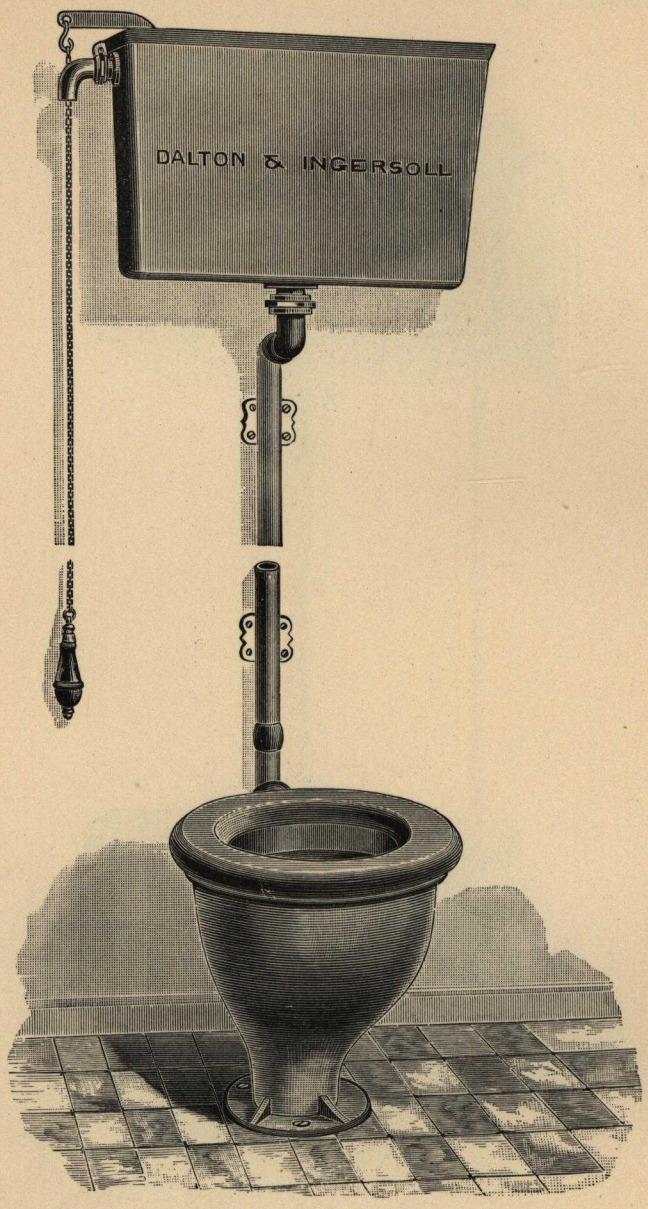


Plate 103.

Complete, with No. 13 Iron Cistern (Plate 7)	$15.00
Can also be furnished as follows:	
Complete, with No. 9 Iron Cistern (Plate 6)	17.00
Complete, with No. 20 I.S. Iron Cistern (Plate 25)	14.50
Complete, with No. 21 I.S. Iron Cistern (Plate 26)	12.25
Add for Vent on Hopper ..... .75 If without Wood Rim, deduct	1.50

If other Seats are desired, see pages 34 to 38. For description of Cisterns, see pages 14 and 26.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 67.

Flushing-Rim Tall Oval Enamelled Iron Hopper.

WITH NO. 11 FORE AND AFTER-WASH IRON CISTERN AND NO. 4 SEAT ON GALVANIZED BRACKETS.

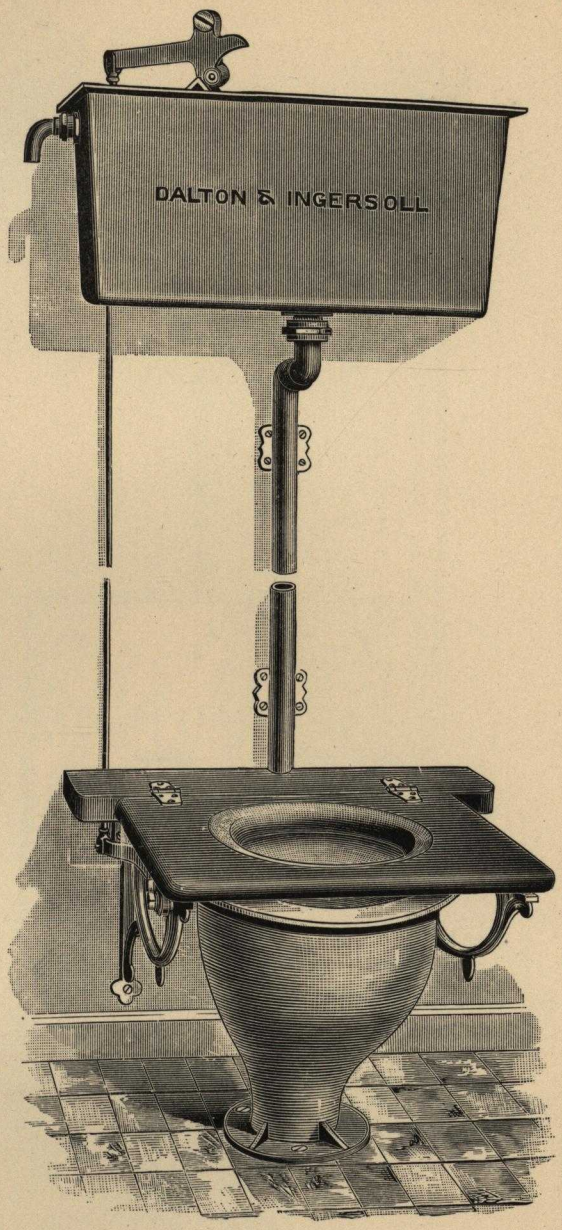


Plate 104.

Complete, with No. 11 Iron Cistern (Plate 14) as shown..... $29.00

Can also be furnished as follows:

	With No. 4 Seat (Plate 34).	With No. 2 Seat (Plate 32).	With No. 1 Seat (Plate 31).
Complete, with No. 11 Iron Cistern (Plate 14)		$27.50	$26.50
Complete, with No. 15 Iron Cistern (Plate 15).....	$28.00	26.50	25.50
Add for Vent on Hopper			.75

For description of Cisterns, see page 20.

For convenience in describing, please designate as Dalton & Ingersoll Water-Closet Apparatus, No. 68.

All Earthenware Flushing-Rim Slop Sink.

WITH NO. 5 IMPROVED COPPER-LINED CISTERN, MARBLE BACK, 48 × 24 INCHES, AND DRAW COCKS.

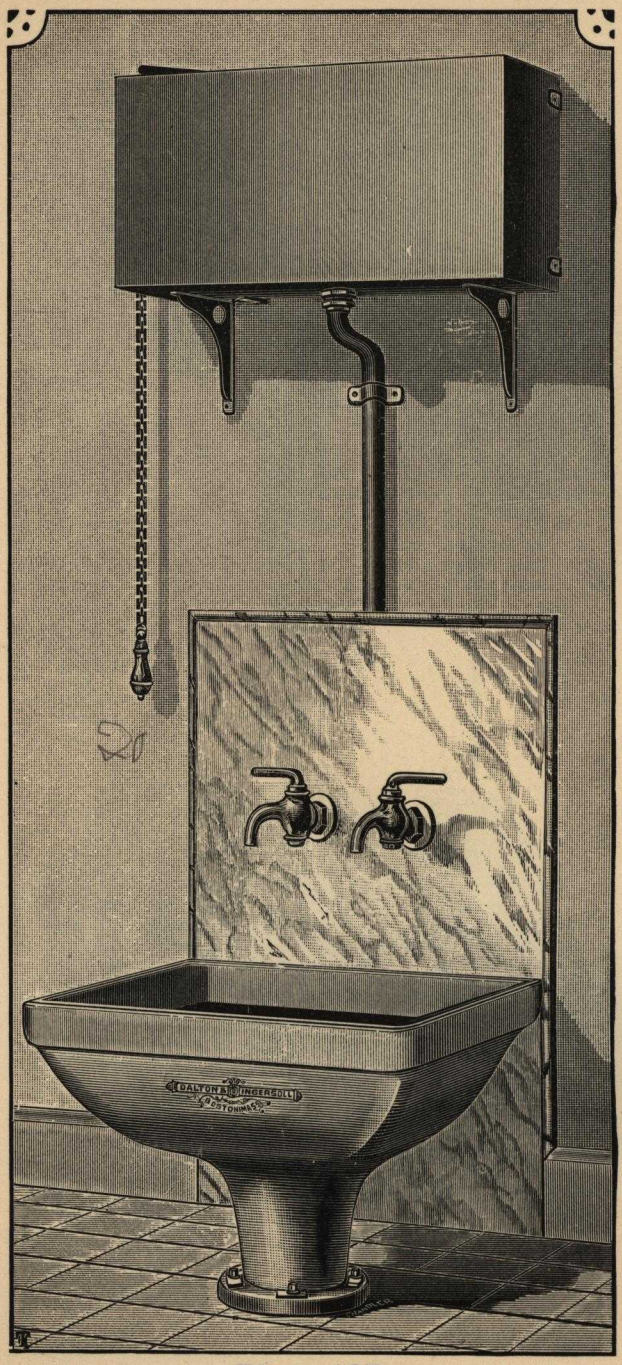


Plate 105.

Price, Slop Sink, only, 22 × 20 inches	$25.00
" Slop Sink and Tank, only	36.50
" Complete	55.00

For convenience in describing, please designate as Dalton & Ingersoll Apparatus, No. 69.

WASH-OUT WATER CLOSETS

— AND —

IMPROVED FLUSHING-RIM HOPPERS.

The Vendome All Earthenware Back-outlet Wash-out Closet.

EMBOSSED.

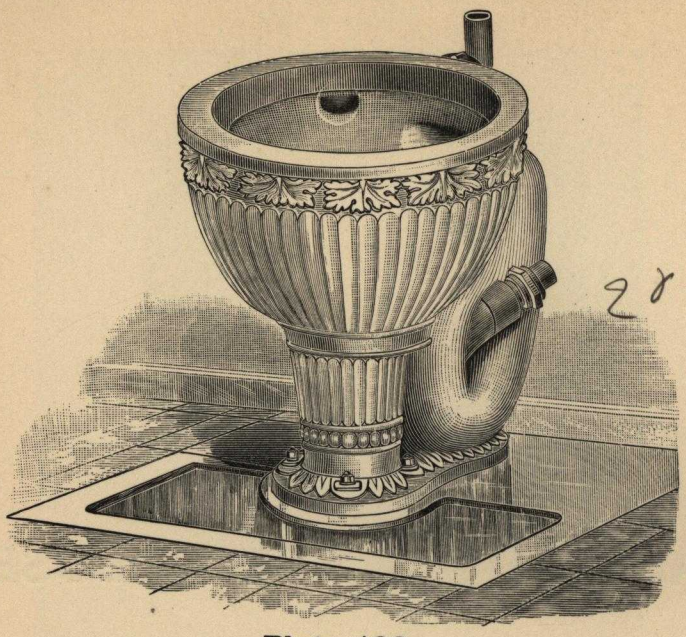


Plate 106.

Price	$25.00
Add for Brass Floor Flange	2.00
If without Trap Vent, deduct	1.00

For suitable Cisterns, see pages 15, 18, and 24. For complete apparatus, see page 69.

The Vendome All Earthenware Back-outlet Wash-out Closet.

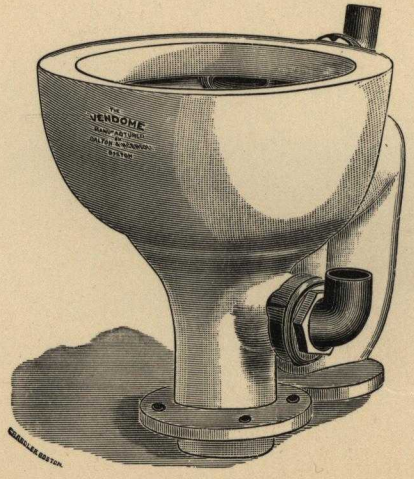


Plate 107.

Price	$20.00
Add for Brass Floor Flange	2.00
If without Trap Vent, deduct	1.00

For suitable Cisterns, see pages 15, 18, and 24. For complete apparatus, see pages 67, 68, 70, and 71. When ordering these Closets with Trap Vent, specify which side the Vent is needed. To insure a perfectly tight joint with the soil pipe, the floor connection should be used.

The Vendome All Earthenware Back-outlet Wash-out Closet.

WITHOUT TRAP.

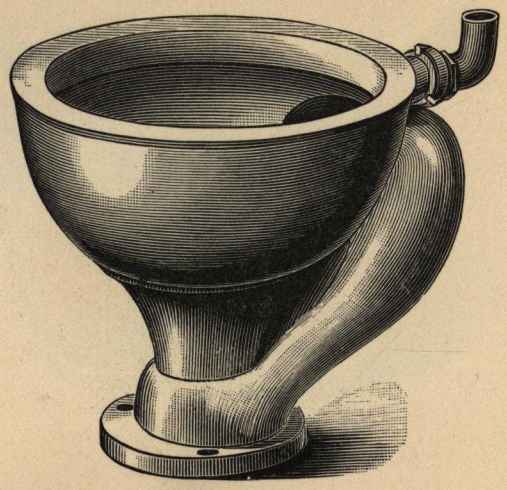


Plate 108.

Price..... $18.75

For suitable Cisterns, see pages 15, 18, and 24. This Closet requires a trap under the floor.

The Victoria All Earthenware Side-outlet Wash-out Closet.

Plate 109.

Price..... $20.00
Add for Brass Floor Flange..... 2.00

To insure a perfectly tight joint with the soil pipe, the floor connection should be used. For suitable Cisterns, see pages 15, 18, and 24.

The Ideal All Earthenware Square Top Wash-out Closet.

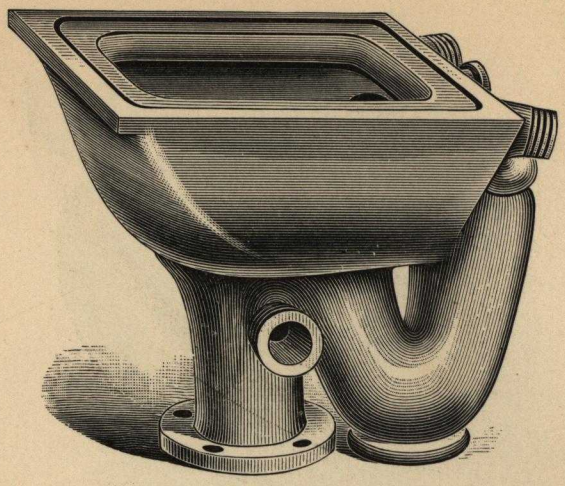


Plate 110.

Price..... $25.00
Add for Brass Floor Flange..... 2.00

When ordering, state which side of trap the vent is needed. To insure a perfectly tight joint with the soil pipe, the floor connection should be used. For suitable Cisterns, see pages 15, 18, and 24. For complete apparatus, see page 65.

The Ideal All Earthenware Back-outlet Wash-out Closet.

WITHOUT TRAP.

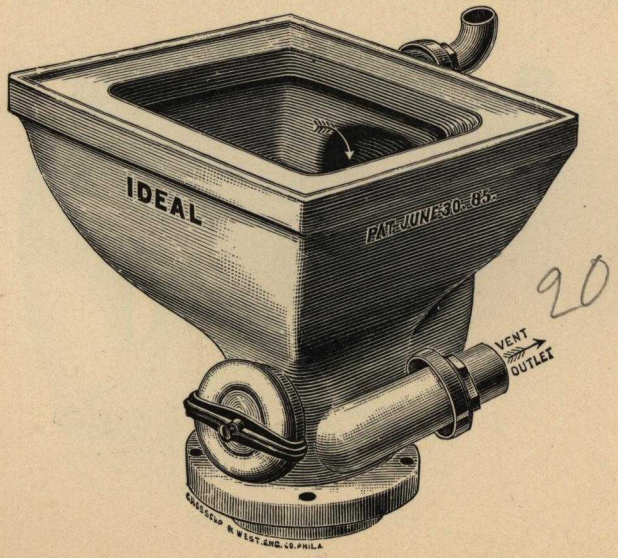


Plate 111.

Price..... $23.75

For suitable Cisterns, see pages 15, 18, and 24. This Closet requires a trap under the floor.

The Somerset All Earthenware Front-outlet Pedestal Wash-out Closet.

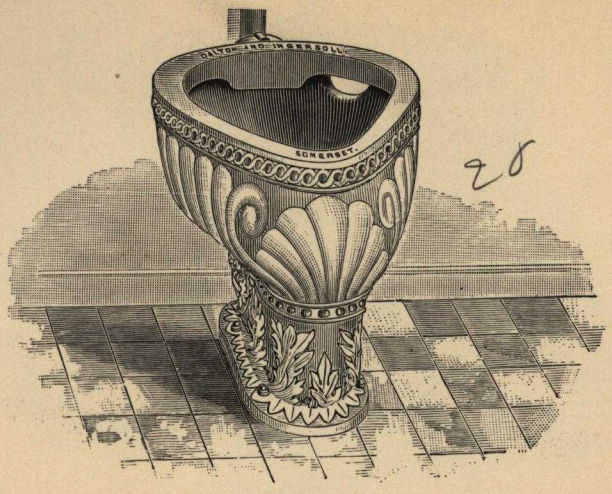


Plate 112.

Price..... $25.00
Add for Brass Floor Flange..... 2.00

For suitable Cisterns, see pages 15, 18, and 24. For complete apparatus, see pages 76 and 77.

The Lenox All Earthenware Front-outlet Wash-out Closet.

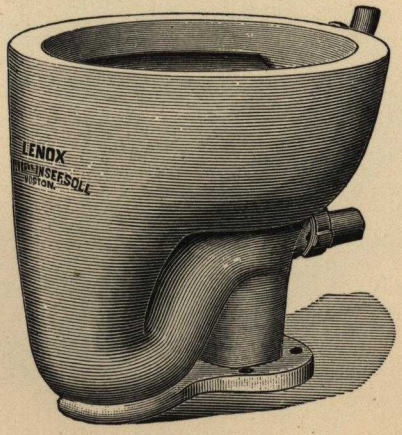


Plate 113.

Price..... $20.00
Add for Brass Floor Flange..... 2.00

For suitable Cisterns, see pages 15, 18, and 24. For complete apparatus, see pages 74 and 75. To insure a perfectly tight joint with the soil pipe, the floor connection should be used.

The Dartmouth Earthenware Combined Hopper and Trap.

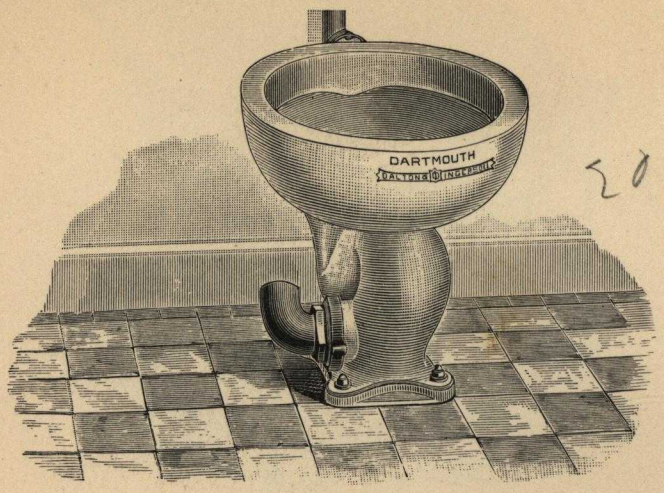


Plate 114.

Price..... $13.00

For complete apparatus, see pages 82, 84, and 86. For Cisterns suitable, see pages 15 to 32.

The Clarendon Earthenware Combined Hopper and Trap.

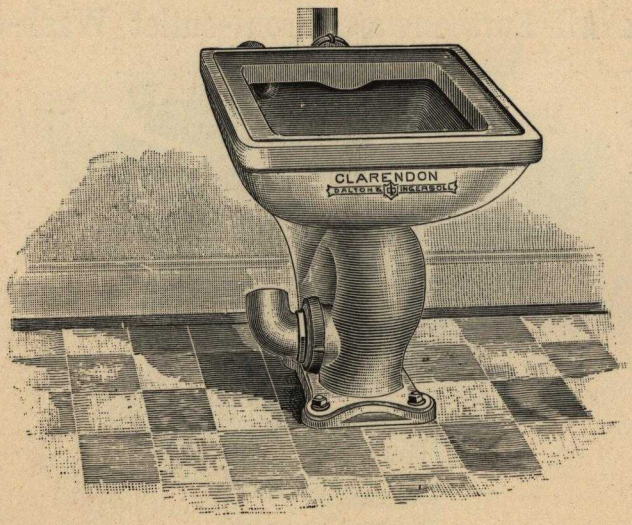


Plate 115.

Price..... $15.50

For complete apparatus, see pages 83, 85, and 87. For suitable Cisterns, see pages 15 to 32. These Hoppers and Traps are made in one piece of earthenware. In ordering, please state which side vent is wanted.

Improved Flushing-Rim Long Oval Earthenware Hopper.

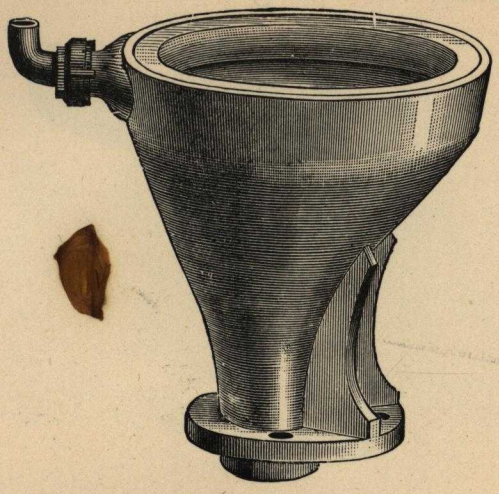


Plate 116.

Price..... $8.00

Improved Flushing-Rim Long Oval Earthenware Hopper.

WITH VENT ARM.

Plate 117.

Price..... $8.50

For Cisterns suitable for these Hoppers, see pages 15 to 32. For complete apparatus, see pages 110 to 113.

Improved Flushing-Rim Long Round Earthenware Hopper.

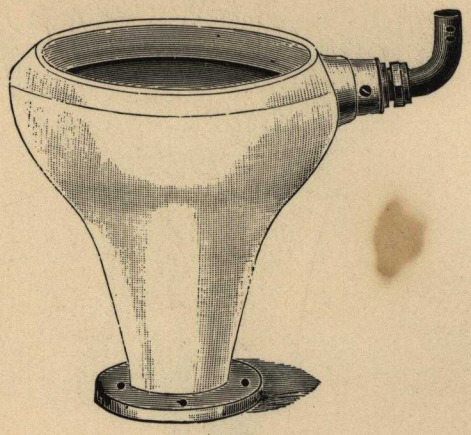


Plate 118.

Price..... $6.50

Improved Flushing-Rim Long Round Earthenware Hopper.

WITH VENT ARM.

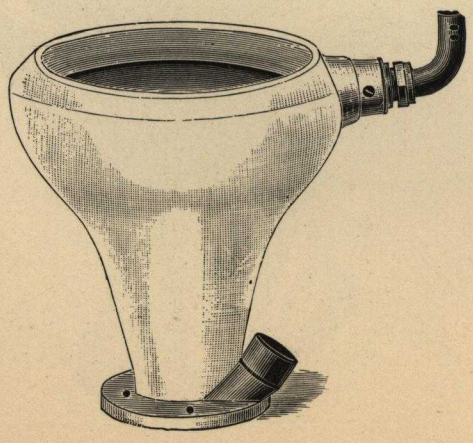


Plate 119.

Price..... $7.00

For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper,

AND EARTHENWARE TRAP, WITH VENT COUPLING.

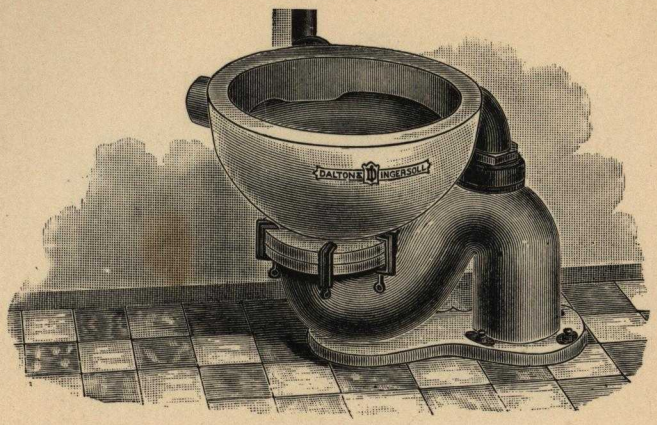


Plate 120.

Price	$8.00
Add for Vent on Bowl	.50
Add for Brass Floor Flange	2.00

For complete apparatus, see pages 90 and 92.

Improved Flushing-Rim Short Square Earthenware Hopper,

AND EARTHENWARE TRAP, WITH VENT COUPLING.

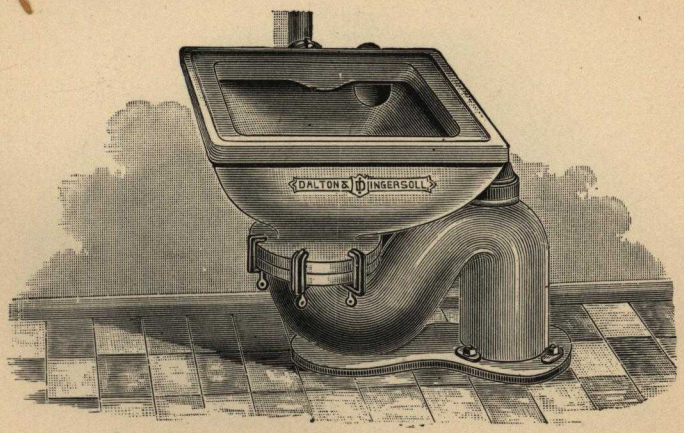


Plate 121.

Price	$10.00
Add for Vent on Bowl	.50
Add for Brass Floor Flange	2.00

For Cisterns suitable for these Hoppers, see pages 15 to 32. For complete apparatus, see pages 91 and 93.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH S LEAD TRAP.

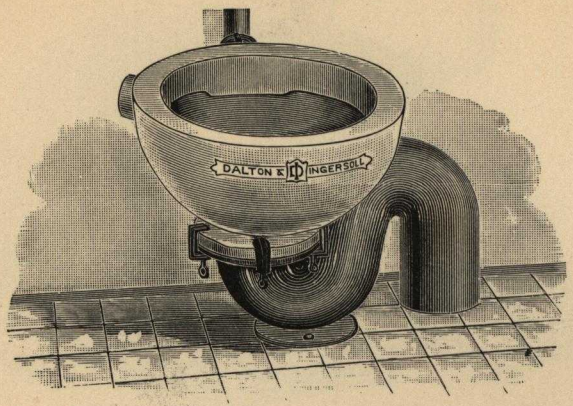


Plate 122.

Price	$8.50
Add for Vent Arm on Bowl	.50

For complete apparatus, see pages 94, 96, 98, and 100.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH S LEAD TRAP.

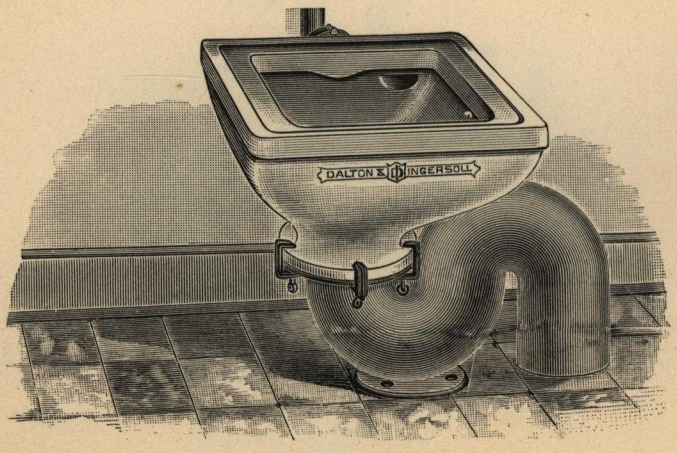


Plate 123.

Price	$10.50
Add for Vent Arm on Bowl	.50

For complete apparatus, see pages 95, 97, 99, and 101. For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH ¾ S LEAD TRAP.

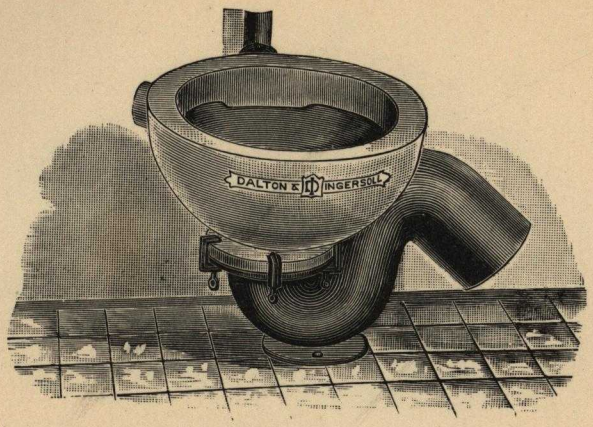


Plate 124.

Price..... $8.50
Add for Vent Arm on Bowl..... .50

For complete apparatus, see pages 94, 96, 98, and 100.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH ¾ S LEAD TRAP.

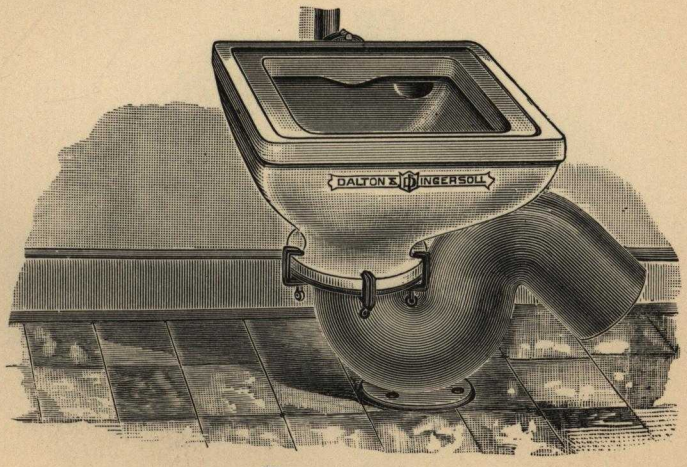


Plate 125.

Price..... $10.50
Add for Vent Arm on Bowl..... .50

For complete apparatus, see pages 95, 97, 99, and 101. For suitable Cisterns for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH ½ S LEAD TRAP.

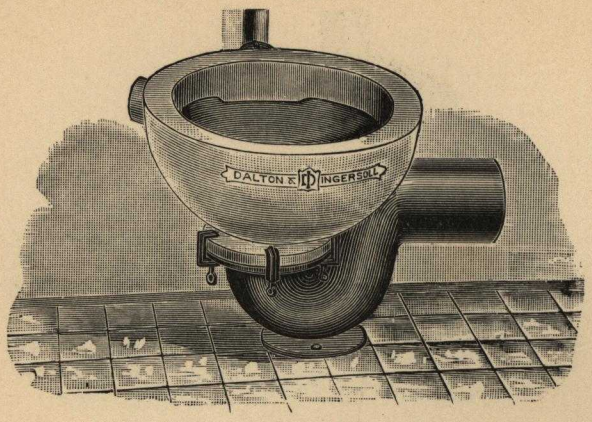


Plate 126.

Price..... $8.50
Add for Vent Arm on Bowl..... .50

For complete apparatus, see pages 94, 96, 98, and 100.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH ½ S LEAD TRAP.

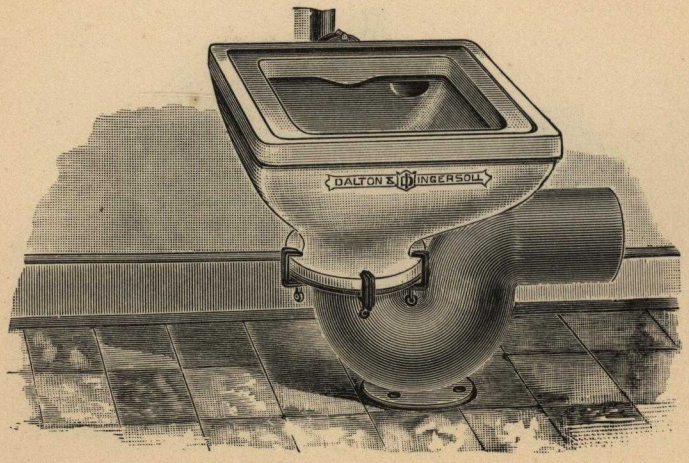


Plate 127.

Price..... $10.50
Add for Vent Arm on Bowl..... .50

For complete apparatus, see pages 95, 97, 99, and 101. For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH S IRON TRAP.

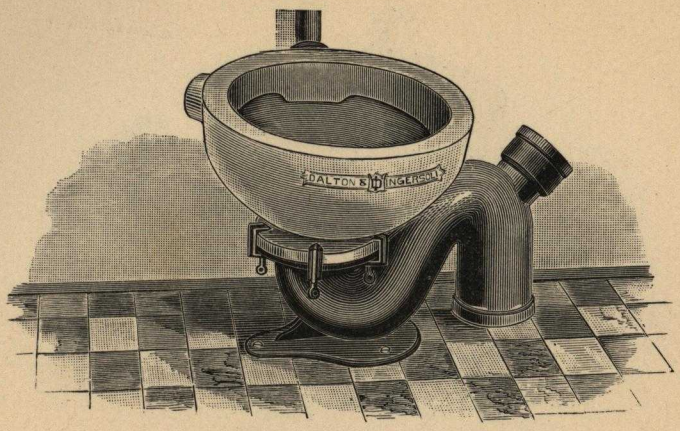


Plate 128.

Price, with Painted Trap $6.00
" with Enamelled Trap 7.00
Add for Vent on Bowl ..... .50

Traps with or without Vent as desired. For complete apparatus, see pages 102, 104, 106, and 108.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH S IRON TRAP.

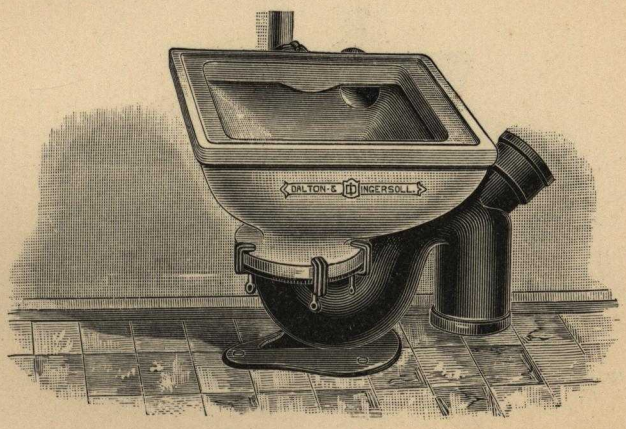


Plate 129.

Price, with Painted Trap $6.00
" with Enamelled Trap 7.00
Add for Vent on Bowl ..... .50

Traps with or without Vent as desired. For complete apparatus, see pages 103, 105, 107, and 109. For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH ¾ S IRON TRAP.

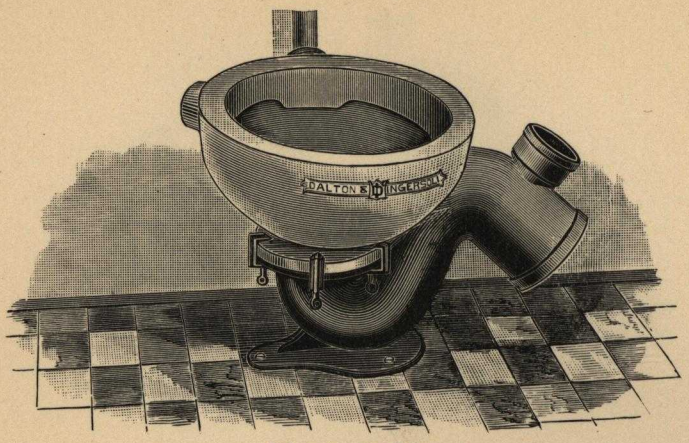


Plate 130.

Price, with Painted Trap	$6.00
" with Enamelled Trap	7.00
Add for Vent on Bowl	.50

Traps with or without Vent as desired. For complete apparatus, see pages 102, 104, 106, and 108.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH ¾ S IRON TRAP.

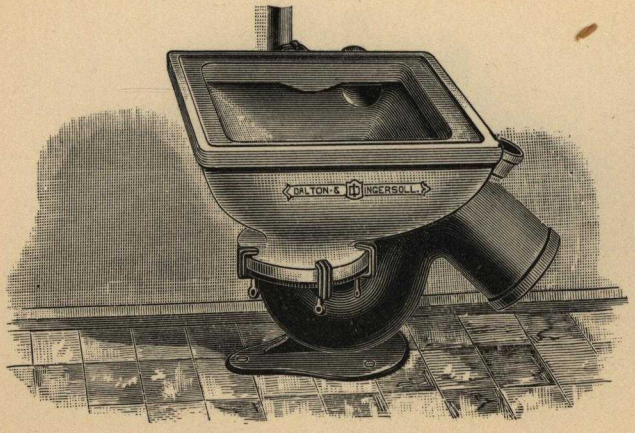


Plate 131.

Price, with Painted Trap	$6.00
" with Enamelled Trap	7.00
Add for Vent on Bowl	.50

Traps with or without Vent as desired. For complete apparatus, see pages 103, 105, 107, and 109. For suitable Cisterns for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Short Oval Earthenware Hopper.

WITH ½ S IRON TRAP.

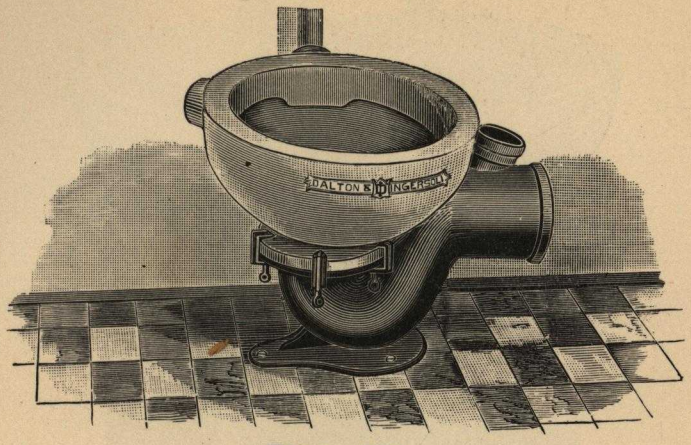


Plate 131.

Price, with Painted Trap	$6.00
" with Enamelled Trap	7.00
Add for Vent on Bowl	.50

Traps with or without Vent as desired. For complete apparatus, see pages 102, 104, 106, and 108.

Improved Flushing-Rim Short Square Earthenware Hopper.

WITH ½ S IRON TRAP.

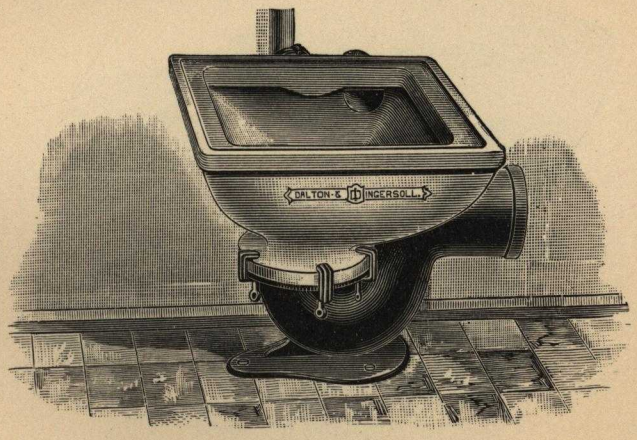


Plate 132.

Price, with Painted Trap	$6.00
" with Enamelled Trap	7.00
Add for Vent on Bowl	.50

Traps with or without Vent as desired. For complete apparatus, see pages 103, 105, 107, and 109. For suitable Cisterns for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Oval Earthenware Bowl.

WITH COMBINED IRON HOPPER AND S TRAP.

Plate 133.

	Brass connection on Bowl.	Plain connection on Bowl.
Price, with Painted Hopper	$4.75	$4.25
" with Enamelled Hopper	6.25	5.75
Add for Vent on Bowl		.50

Improved Flushing-Rim Oval Earthenware Bowl.

WITH COMBINED IRON HOPPER AND ¾ S TRAP.

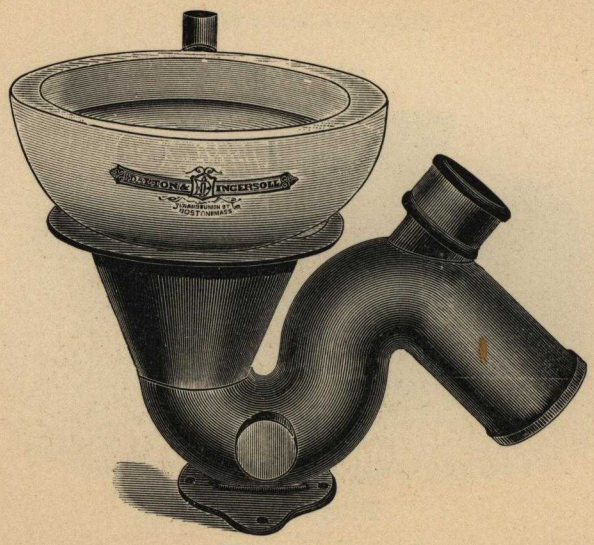


Plate 134.

	Brass connection on Bowl.	Plain connection on Bowl.
Price, with Painted Hopper	$4.75	$4.25
" with Enamelled Hopper	6.25	5.75
Add for Vent on Bowl		.50

For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Oval Earthenware Bowl.

WITH COMBINED IRON HOPPER AND ½ S TRAP.

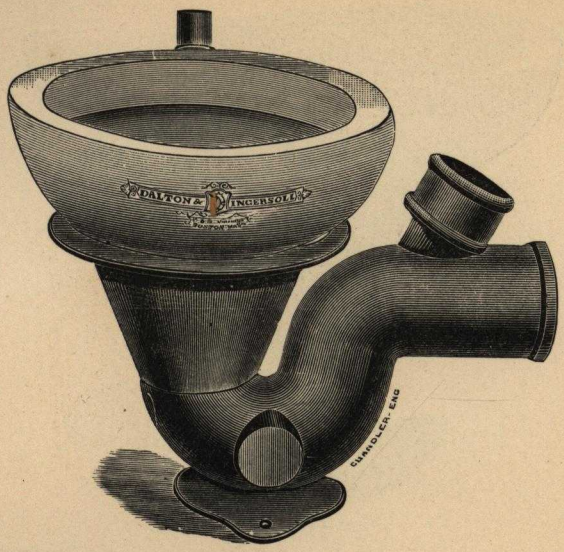


Plate 135.

	Brass connection on Bowl.	Plain connection on Bowl.
Price, with Painted Hopper	$4.75	$4.25
" with Enamelled Hopper	6.25	5.75
Add for Vent on Bowl		.50

Flushing-Rim Short Oval Enamelled Iron Hopper.

WITH IRON TRAP.

Plate 136.

Price, with Plain Trap	$6.50
" with Enamelled Trap	7.50

Traps with or without Vents as desired. For complete apparatus, see pages 114 and 115. For Cisterns suitable for these Hoppers, see pages 15 to 32.

Improved Flushing-Rim Oval Earthenware Bowl.

BRASS CONNECTION WITH IRON VENTILATING HOPPER.

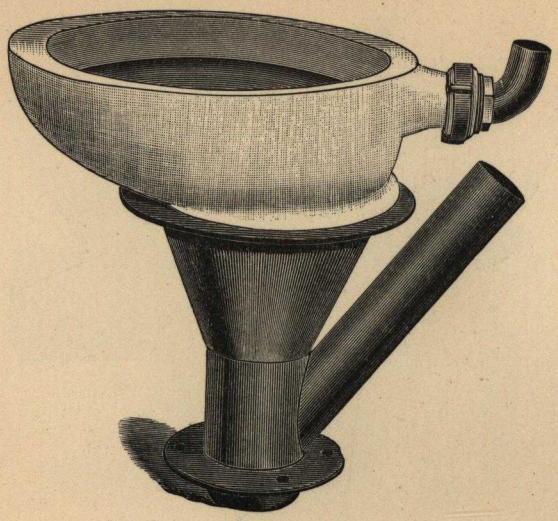


Plate 137.

	Brass connection on Bowl.	Plain connection on Bowl.
Price, with Enamelled Hopper	$4.00	$3.50
" with Plain Hopper	3.50	3.00
Add for Vent on Bowl		.50

Improved Flushing-Rim Oval Earthenware Bowl.

WITH IRON HOPPER.

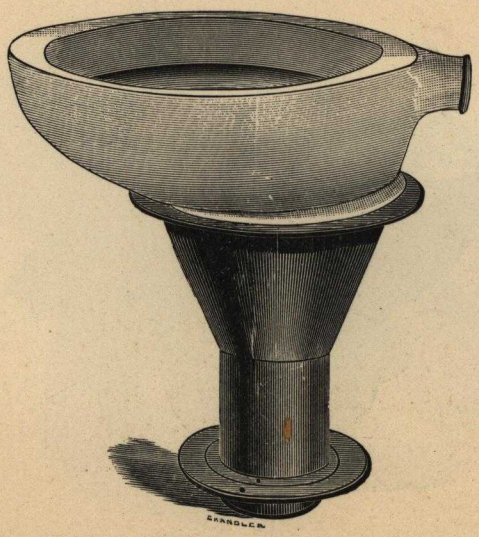


Plate 138.

	Brass connection on Bowl.	Plain connection on Bowl.
Price, with Enamelled Hopper	$3.75	$3.25
Add for Vent on Bowl		.50

For Cisterns suitable for these Hoppers, see pages 15 to 32.

Flushing-Rim Long Round Enamelled Iron Hopper.

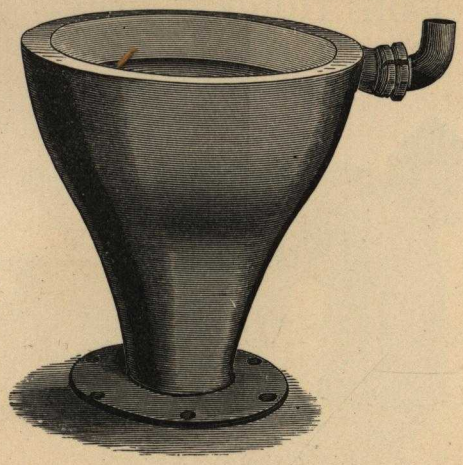


Plate 139.

Price $5.00

Flushing-Rim Long Oval Enamelled Iron Hopper.

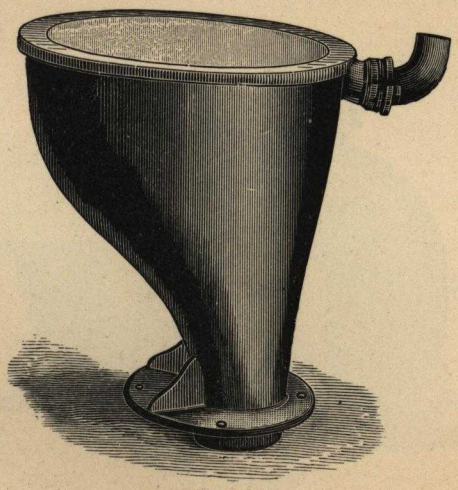


Plate 140.

Price $5.50
" with Vent 6.25

For complete apparatus, see pages 116 and 117. For suitable Cisterns for these Hoppers, see pages 15 to 32.

Iron Hopper Traps.

FULL S.

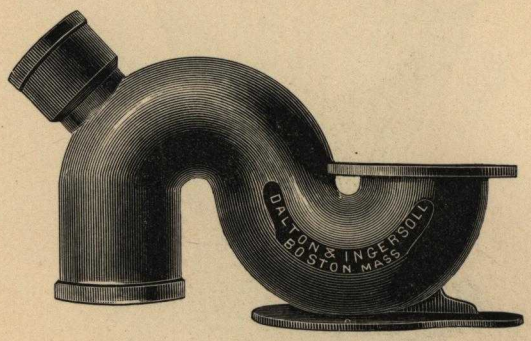


Plate 141.

Price, Plain $2.00
" Enamelled 3.00

FULL S WITH FLANGE FOR LEAD PIPE.

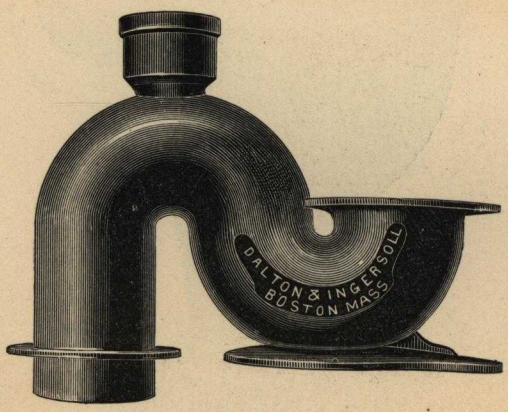


Plate 142.

Price, Plain $2.00
" Enamelled 3.00

Traps furnished with or without Vent as desired.

Iron Hopper Traps.

THREE-QUARTER S.

Plate 143.

Price, Plain	$2.00
" Enamelled	3.00

ONE-HALF S.

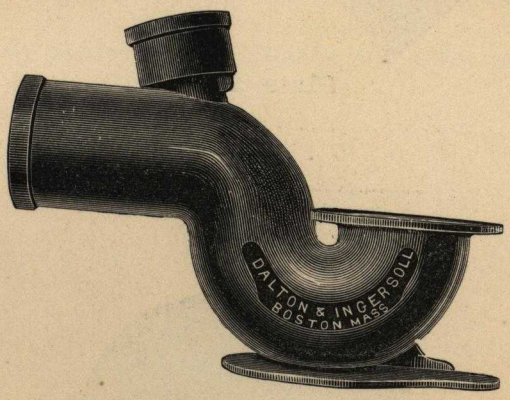


Plate 144.

Price, Plain	$2.00
" Enamelled	3.00

Traps furnished with or without Vent as desired.

Lead Bends for Boston Hopper.

FULL S.

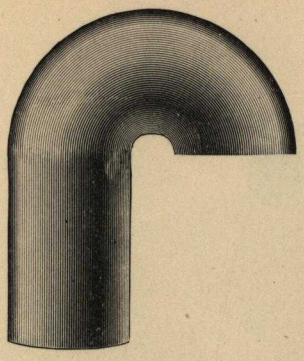


Plate 145.

Price, each $1.50

THREE-QUARTER S.

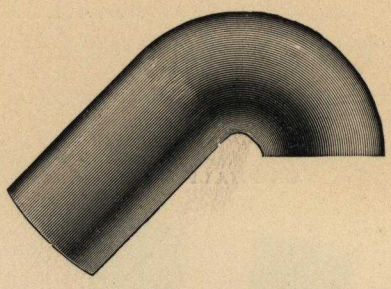


Plate 146.

Price, each $1.50

HALF S.

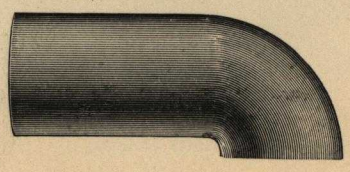


Plate 147.

Price, each $1.25

These Bends are used to connect our Boston Hopper (see pages 57 to 64) with Iron Soil Pipe.

BOSTON LAVATORY, SOMERSET RECESS BASIN,

AND

PANTRY SINK.

COPPER-LINED AND ENAMELLED BATH TUBS,

AND

SITZ AND FOOT BATHS,

With Boston Patent Waste and Overflow.

Boston Lavatory.

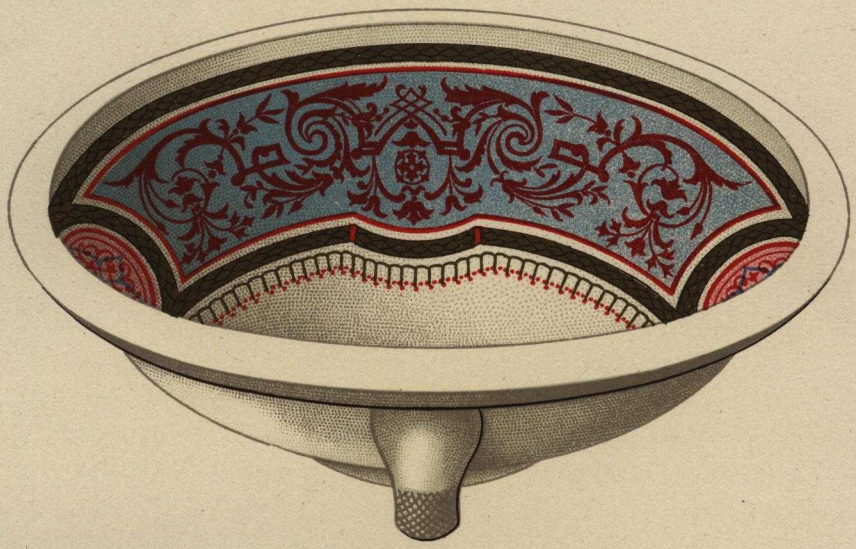
Before explaining this bowl, we will speak of the causes that brought about the present innovations in wash-bowls.

A few years ago sanitarians found fault (and with good cause) with the old-style wash-bowls; they were commonly fitted with a plug which was made fast to the slab by a chain, and were provided with a series of perforations on one side of the bowl leading to an overflow arm; this in turn was connected by a lead pipe to the waste pipe at the bottom of the bowl. This overflow pipe after having been in use a short time became very foul, and emitted a very disagreeable odor, and there was no possible way of cleaning it other than calling in the services of a plumber, who either cut the waste pipe or sprung the overflow down (when that was possible), thereby exposing the end of the overflow, which allowed him the opportunity to insert something with which to clean the pipe. Owing to this difficulty the pipe was very rarely cleaned, and the odor from it was very disagreeable to those using the bowl. The plug or outlet to these bowls was very small, requiring a long time to discharge the contents, and never in sufficient volume to charge the waste pipe and scour its surface, which was a frequent cause of the pipe clogging.

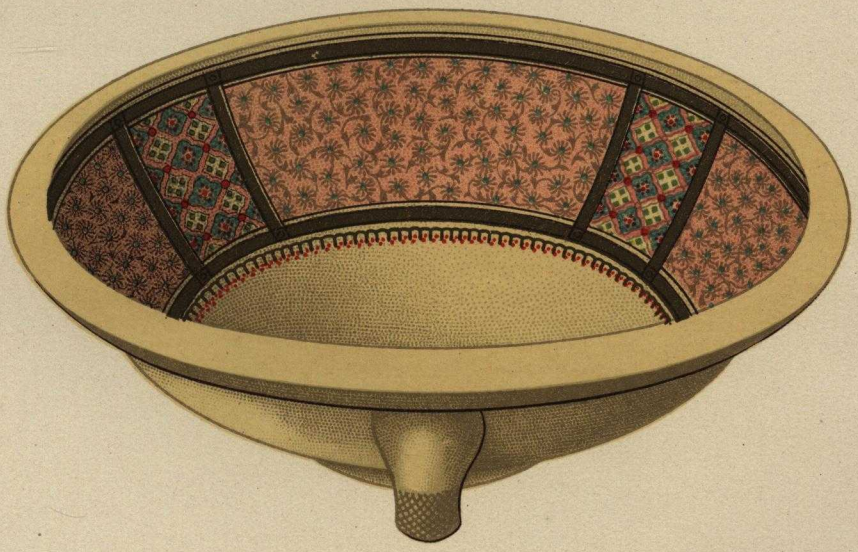
To remedy these defects was the cause of the present construction and fitting of sanitary wash-bowls. These have been made in various forms and with varying results. One of these styles is the Recess Basin, with a stand pipe inside the bowl. This construction is a decided improvement over the old; but owing to the difficulty experienced in disconnecting and reconnecting the stand pipe, the recess of the bowl and the interior of the pipe is not cleaned as frequently as it ought to be.

Again, there is another style that has a chamber made on the back of the bowl; this is fitted with a stand pipe, the top of which leads up through the slab. This pipe serves the dual purpose of plug and overflow. There is a passage leading from the bottom of the bowl into the chamber, and as the water rises in the bowl it also rises in the chamber, and what foulness it comes in contact with is communicated more or less to the water in the bowl. This is objectionable, as you cannot see the condition of the chamber, more particularly in hotels and other public places. This construction has a very large amount of fouling surface to be taken care of; *i.e.*, the inner walls of the chamber and the outer and inner walls of the stand pipe.

After mentioning the above defects, we will state that we have overcome them all in the construction of the **BOSTON LAVATORY.** The mechanical part of this basin is simplicity itself, and its fouling surface at the minimum.



DESIGN Nº 534.

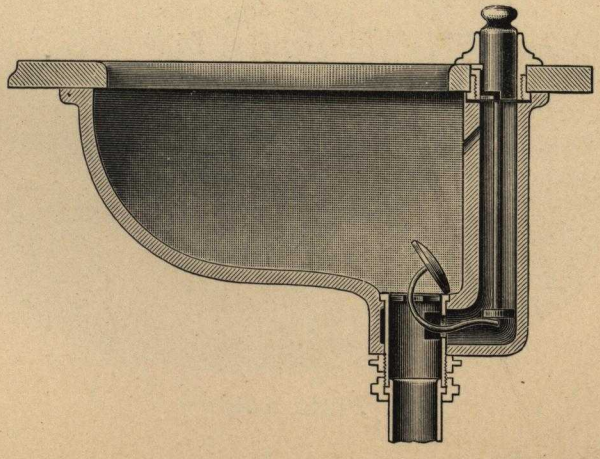


DESIGN Nº 403.

The following is a description of the bowl as it appears in the sectional cut. The outlet is provided with a $1\frac{1}{2}$ inch sleeve; this is fitted with a grating to prevent solids from dropping into the waste pipe; the upper part of this sleeve is provided with a plug which when closed simply rests on the flange of the sleeve, instead of fitting into a socket, as in the old style. This construction, while making a perfectly tight joint, prevents any possibility of sticking. From the bottom of the plug leads an arm of $\frac{1}{4}$ inch drawn brass wire, which is very strong and smooth, with a curve sufficient to allow the plug to swing on its edge. On the back of the bowl is the overflow passage, $1\frac{1}{2}$ inch in diameter, and made in one piece with the bowl; this passage communicates with the bowl through a slot 2 inches long by $\frac{5}{8}$ inch wide, the walls of which are at such an angle as to prevent the user from seeing into the overflow passage, and also to prevent anything from going into the overflow that is floating on the water, thus making open communication with the interior of the passage. As will be seen from the above, the overflow passage is also a means whereby connection is made between the lift on the slab and the arm of the plug. The flange through which the lift moves is provided with a pin, and the lift with a bayonet-shaped slot interlocking with each other. From the bottom of the lift extends a $\frac{1}{4}$ inch drawn brass wire, provided with an open disk at its lower end which allows free passage to any overflow that may occur. To operate the bowl, raise the lift and rotate it; this will allow the plug to drop to its seat; the reverse motion will open it.

To clean the overflow passage, raise the lift entirely out of its socket, and the passage is exposed to view from the slab to the plug at the bottom of the bowl. The plug can also be taken out if desired. As there are no screws or hooks to be detached, any part of the fixtures of this bowl when taken out can be dropped back into position again without the slightest trouble.

There is one point that should be mentioned in connection with this bowl that does not occur in any other sanitary wash-bowl, and that is, when water is let into this bowl it does not come in contact with any surface that is not exposed to the eye of the user. The value of this will be appreciated by those who stop to think.



The bowls are made Oval and Round, Marbleized, Ivory-tinted, and Decorated.

Round Boston Lavatory.

SIZE, 14 INCHES.

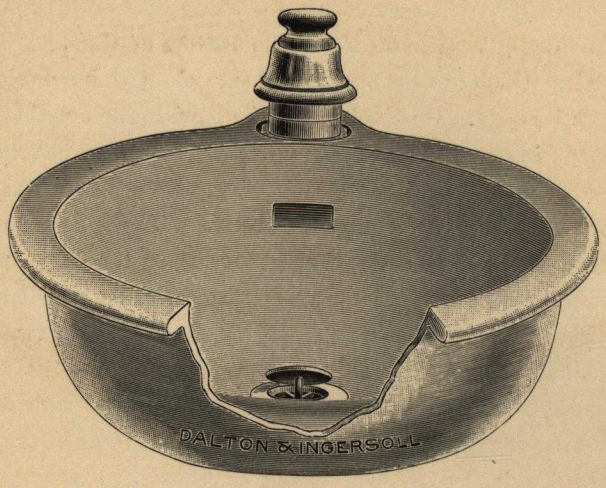


Plate 148.

Price, with Nickel-Plated Fixtures	$10.00
" with Silver-Plated Fixtures	11.50

Oval Boston Lavatory.

SIZE, 15 × 19 AND 16 × 21 INCHES.

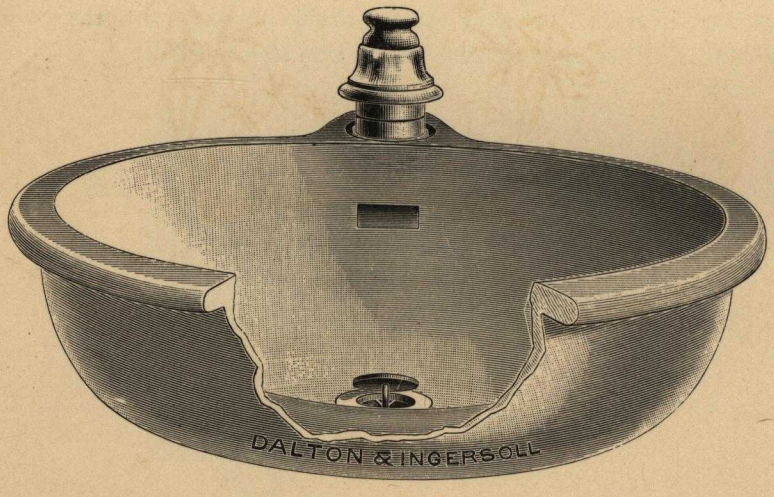
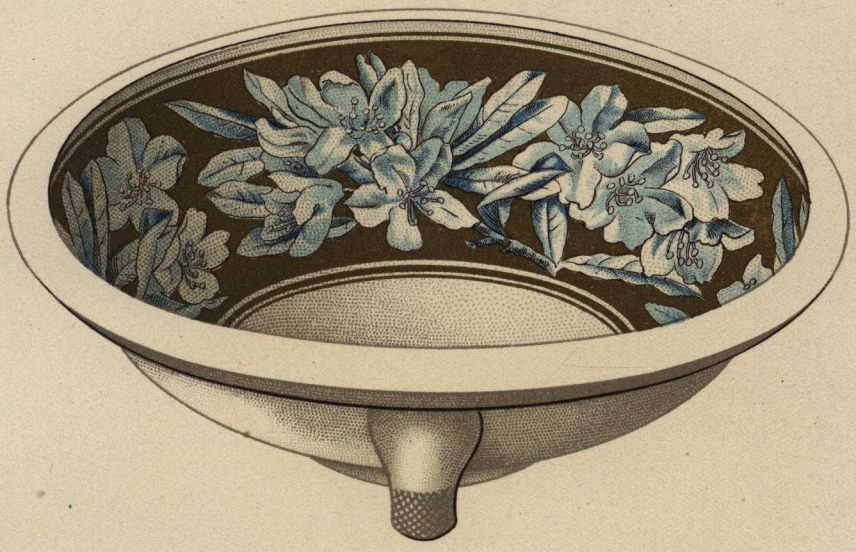
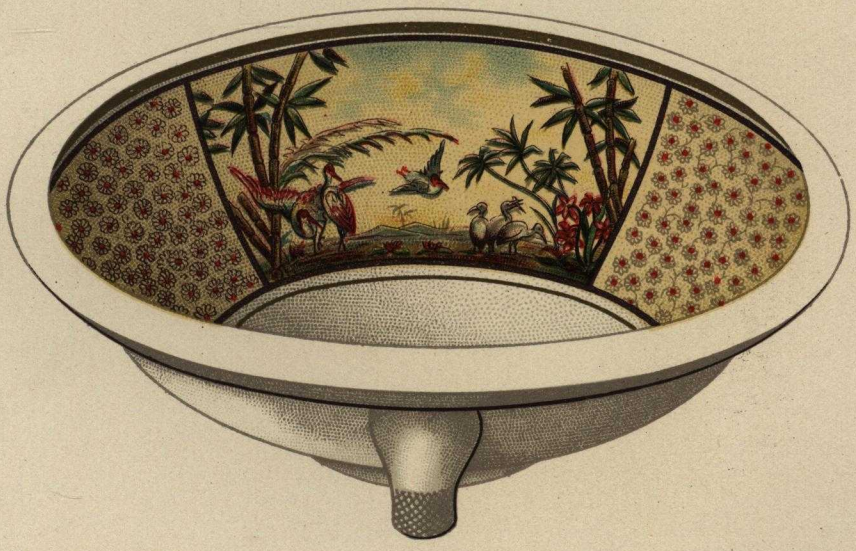


Plate 149.

	15 × 19 in.	16 × 21 in.
Price, with Nickel-Plated Fixtures	$12.50	$13.50
" with Silver-Plated Fixtures	14.00	15.00



DESIGN Nº 373.



DESIGN Nº 388.

The Boston Open Lavatory.

ON BRACKETS.

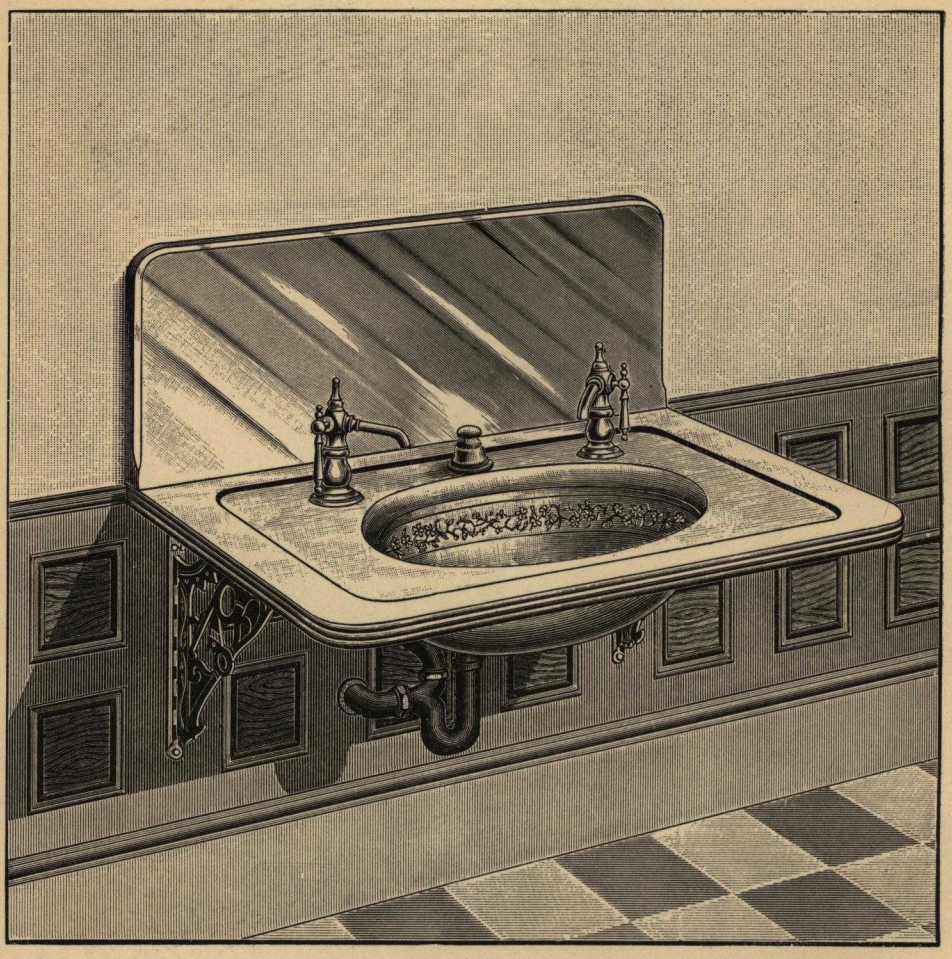


Plate 151.

Italian Marble Slab and Back, Boston Lavatory Basin with Fixtures, Basin Cocks, Brackets, and Somerset Trap.

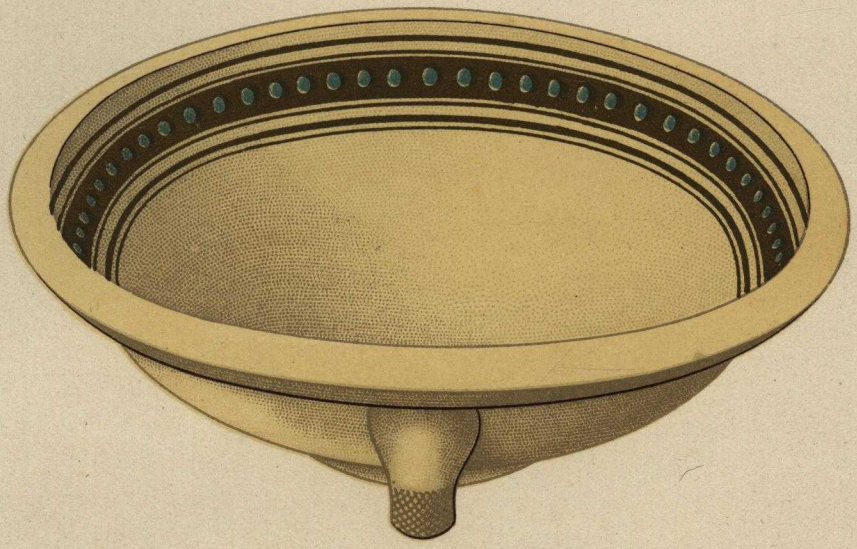
	Nickel-Plated Fixtures.	Silver-Plated Fixtures.
Price, with Marble Basin	$46.00	$56.00
" with Decorated Basin, furnished on application.		
If of Tennessee Marble, add		4.50

Size of Marble, 36 × 22 inches; Back, 12 inches high. Other sizes made to order. Size of Basin, 15 × 19 inches outside the Flange.

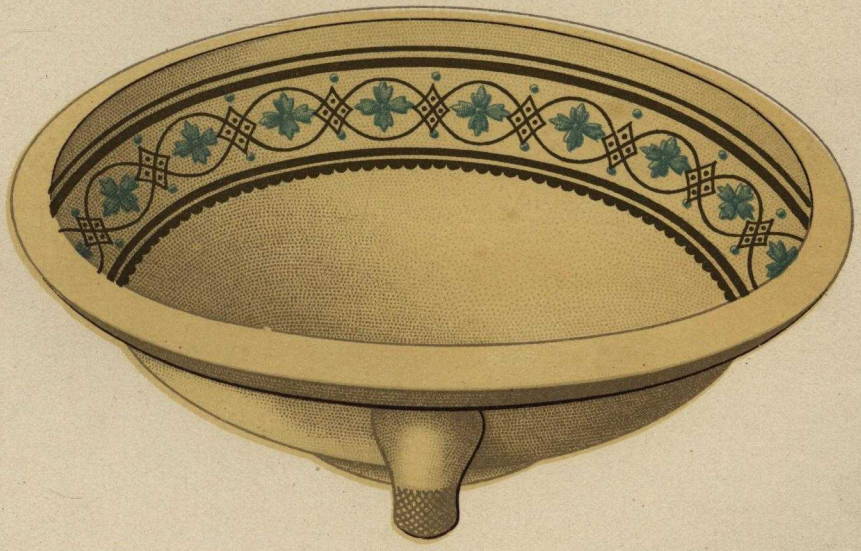
Basins furnished either White Marbleized, White Decorated, or Ivory Decorated.

Decorated Basins furnished in any of the designs illustrated on previous pages.

For description of Lavatory, see page 142. For description of Somerset Basin Trap, see page 150.



DESIGN Nº 408.



DESIGN Nº 409.

The Boston Open Lavatory.

ON LEGS.

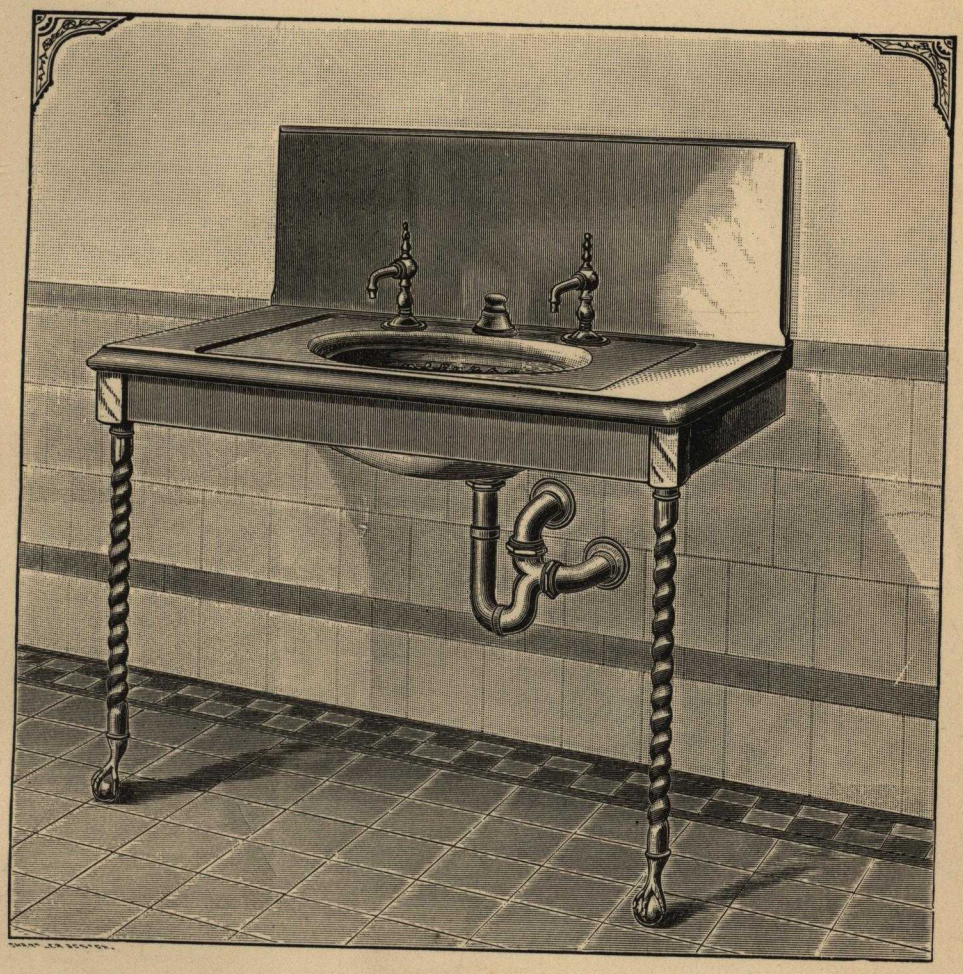


Plate 152.

Italian Marble Slab and Back, Boston Lavatory Basin with Fixtures, Basin Cocks, Brass Legs, and Somerset Trap.

	Nickel-Plated Fixtures.	Silver-Plated Fixtures.
Price, with Marbled Basin	$53.00	$63.00
" with Decorated Basin, furnished on application.		
If of Tennessee Marble, add		5.50

Size of Marble, 36 × 22 inches; Back, 12 inches high. Other sizes made to order. Size of Basin, 15 × 19 inches outside the Flange.

Basins furnished either White Marbleized, White Decorated, or Ivory Decorated.

Decorated Basins furnished in any of the designs illustrated on previous pages.

For description of Lavatory, see page 142. For description of Somerset Basin Trap, see page 150.

The Boston Open Lavatory.

ALL MARBLE.

Plate 153.

Italian Marble Lavatory, Boston Basin with Fixtures, Basin Cocks, and Somerset Trap.

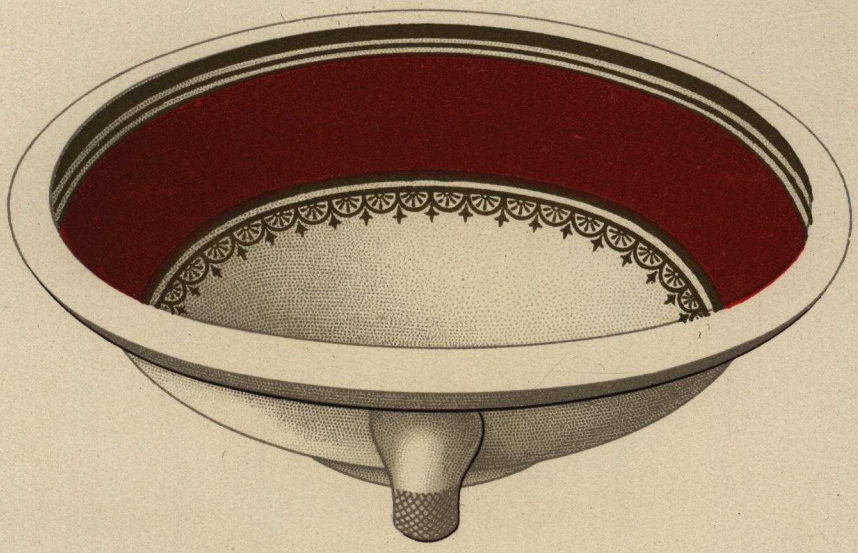
	Nickel-Plated Fixtures.	Silver-Plated Fixtures.
Price, with Marble Basin	$86.50	$92.00
" with Decorated Basin, furnished on application.		
If of Tennessee Marble, add		10.00

Size of Marble Slab, 36 × 22 inches; Back, 15 inches high. Other sizes made to order. Size of Basin, 15 × 19 inches outside the Flange.

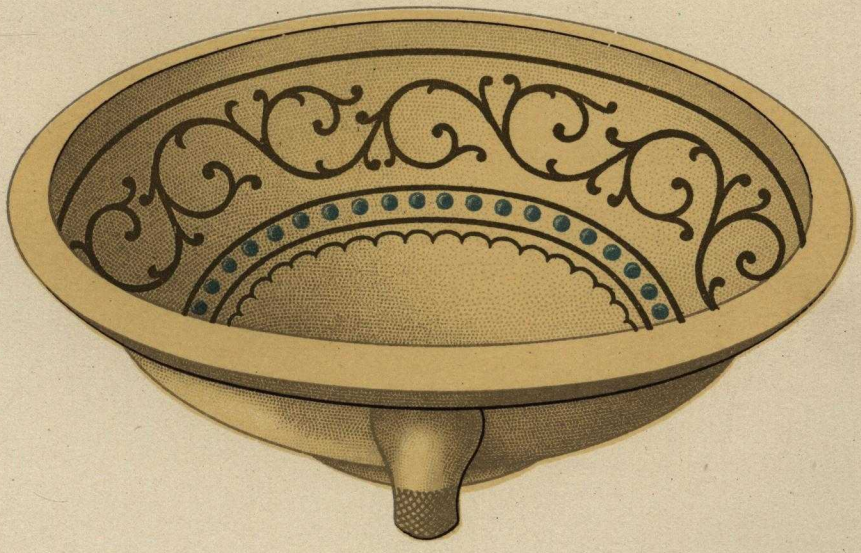
Basins furnished either in White Marbleized, White Decorated, or Ivory Decorated.

Decorated Basins furnished in any of the designs illustrated on previous pages.

For description of Basin, see page 142. For description of Somerset Basin Traps, see page 150.



DESIGN Nº 518.



DESIGN Nº 508.

Brass Lavatory Legs.

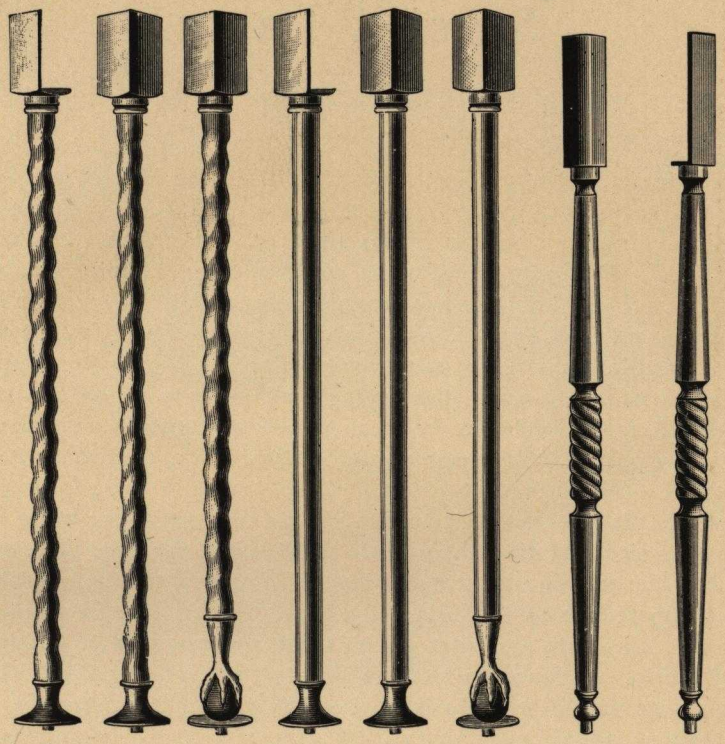


Plate 154.

	1	2	3	4	5	6	7	8	
Price, Polished Brass.....	$3.50	$3.50	$4.00	$3.50	$3.50	$4.00	$3.50	$3.50	each.
" Nickel-Plated	4.50	4.50	5.00	4.50	4.50	5.00	4.50	4.50	"

Nos. 1, 4, and 8 are intended for a Middle Support.

Brass Slab Brackets.

Price, Polished Brass.....$4.50 per pair.

" Nickel-Plated ..... 5.50 "

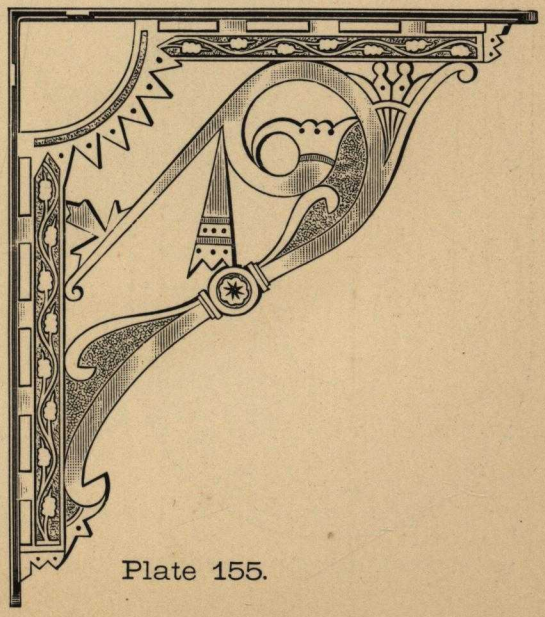


Plate 155.

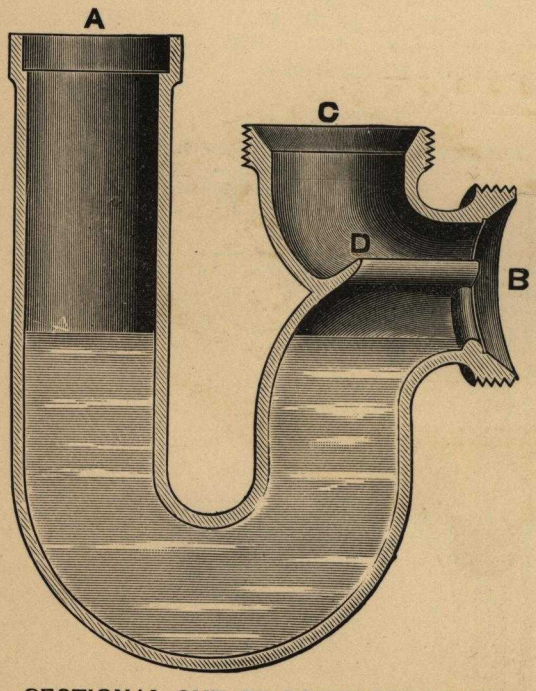
Somerset Traps.

The novel feature in this trap is the **Shelf D** which encircles the opening of the back air pipe at its point of connection with the trap. Its upper surface is slightly concave, and it performs two very important functions during the use of the trap.

The first is: It effectively prevents the entrance of water into the air pipe while the trap is discharging. This allows a free and uninterrupted flow of air in the direction in which the water is flowing, thus positively preventing siphonage of the trap's contents. Whereas in traps of the same general shape that are not provided with this deflecting shelf, occasionally, when discharging their contents, a play of water is forced into the air pipe **C**, and is held there by the more powerful current underneath until the trap is partially siphoned. This point has been tested by a number of experts and found to exist.

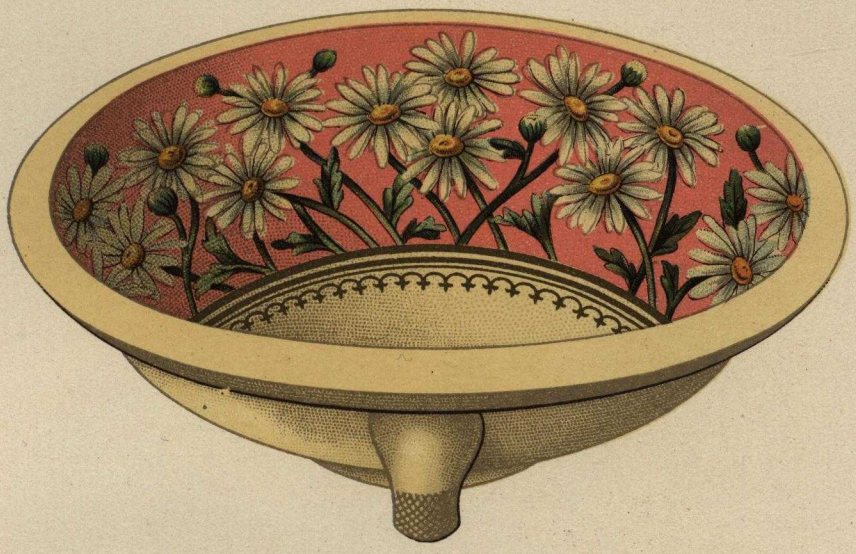
The second is: It catches on its concave surface the condensing vapor that trickles from the back air pipe, and discharges it into the outlet of the trap, thereby preventing it from polluting the standing water in the trap. To understand the importance of this it is only necessary to look at the inside of a pipe that has been in use as a vent pipe for a year or so. All waste and vent pipes in the water system of buildings after a short time of service are found to be thickly coated with a filthy slime, which emits a foul and sickly odor, and, if not unhealthy, it certainly is very disagreeable to inhale.

This deposit is caused by the vapors that arise from the discharges that take place in the soil and waste pipes. Therefore the condensed vapor in the form of foul water that trickles down the sides of the back air pipe must not be allowed to enter the water standing in the trap, otherwise the trap's contents will become foul, and as the temperature of the water increases it will emit a disagreeable if not a dangerous odor; and while traps are vented on the crown, and while air pipes are carried up vertically any great distance, it will be necessary to have some means to carry off this condensation. This we do in the **SOMERSET TRAPS,** and it is the only trap that does it.

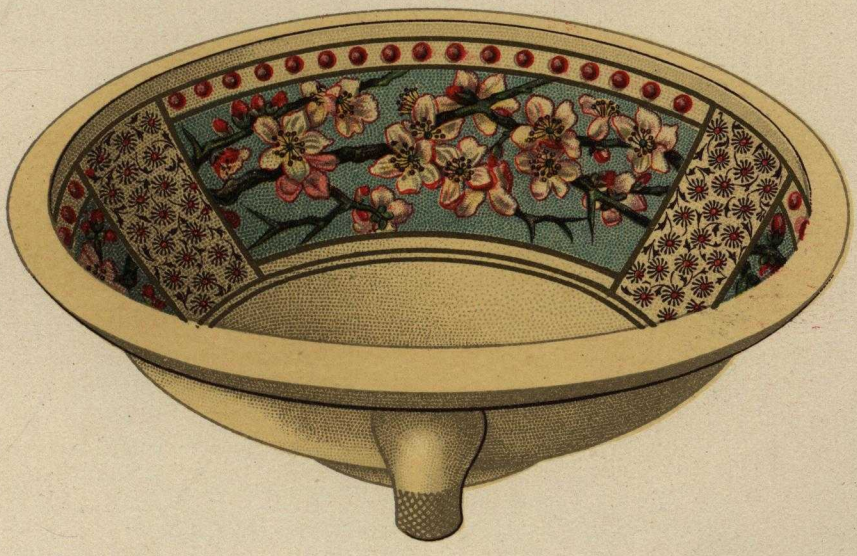


SECTIONAL CUT OF SOMERSET TRAP.

This trap is made of cast brass, and its vent and waste ends are fitted with Ground Union Couplings. This dispenses with washers that are liable to shrink and cause a leak. Each end is fitted with flanges and bent thimbles screwed to fit the couplings, making it a complete apparatus in itself. Accompanying the trap are two supply connections of the same design, and complete the brass pipe connections of a washstand.



DESIGN Nº 511.



DESIGN Nº 516.

Brass Somerset Basin Trap.

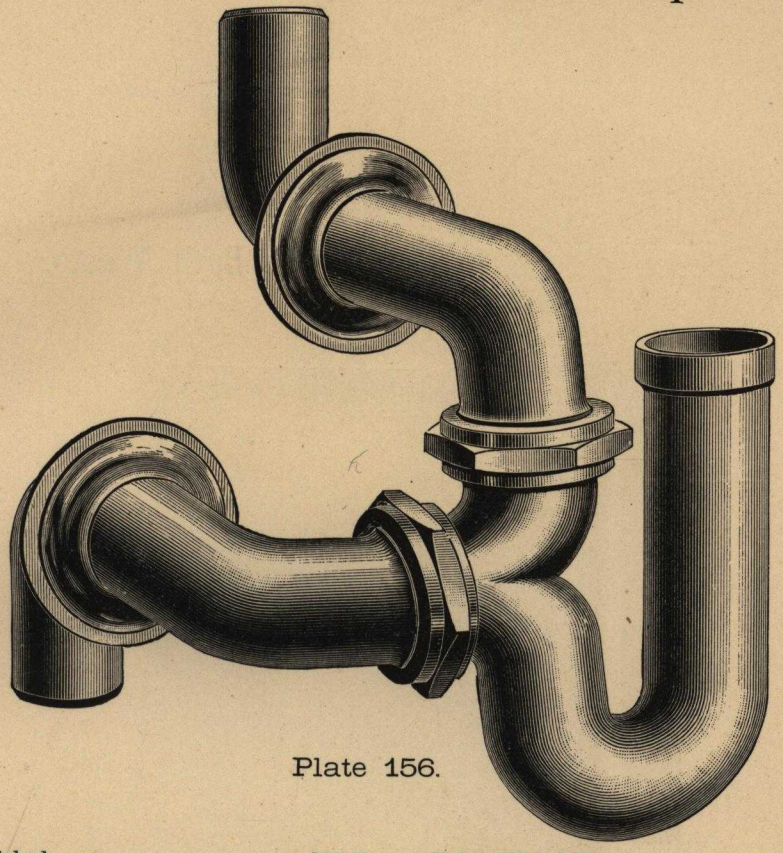


Plate 156.

Price, Polished..... ..... $10.00 Price, Nickel-Plated..... $12.00

Brass Basin Cock Connection.

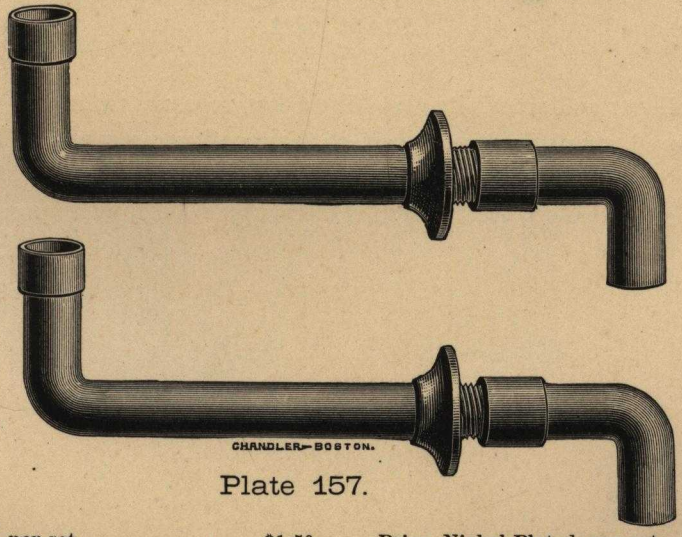


Plate 157.

Price, Polished, per set..... $1.50 Price, Nickel-Plated, per set $2.00

Where Open Lavatories are used, as shown on pages 146, 147, and 148, and the supplies can be concealed behind the finish, these fittings should be used to connect with the Basin Cock.

Section of the Boston Patent Bath Waste.

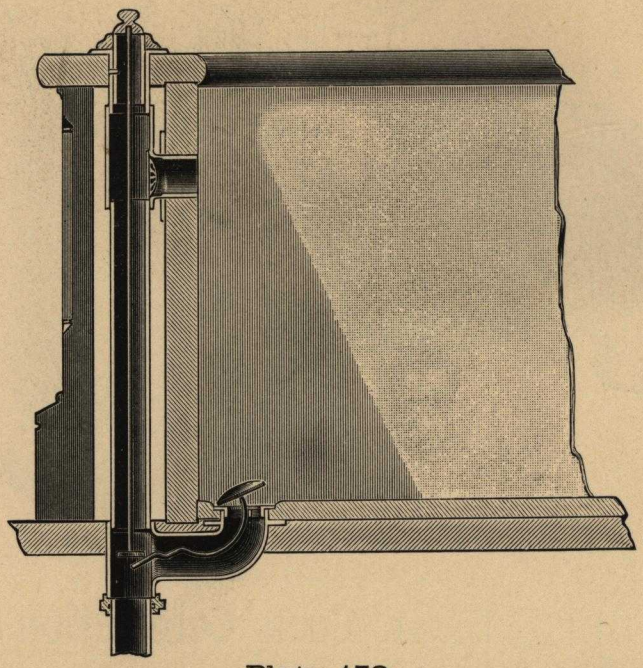


Plate 158.

For cleanliness and simplicity this Waste has no equal. The working parts can be easily removed, permitting every part of the overflow and waste to be thoroughly cleaned.

For further particulars, see description of Boston Lavatory on page 142.

Copper Seat Bath.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES.

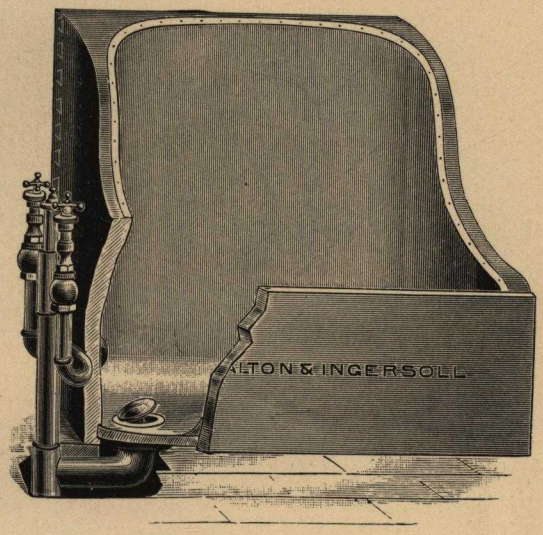


Plate 159.

	12	14	16	18	20 oz.
Price, with Nickel-Plated Supply Fixtures	$36.00	$37.00	$38.00	$39.00	$40.00
Add for Silver-Plated Fixtures					6.00

Copper Foot Bath.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES.

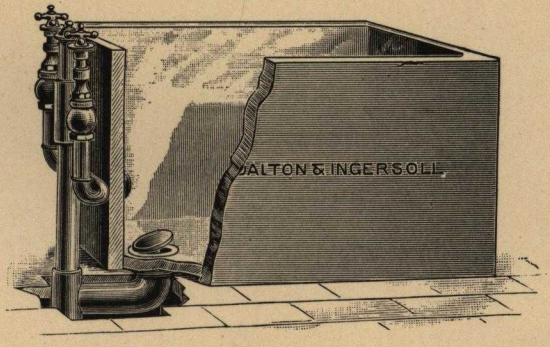


Plate 160.

	12	14	16	18 oz.
Price, with Nickel-Plated Fixtures	$33.00	$34.00	$35.00	$36.00
Add for Silver-Plated Fixtures				6.00

Copper Bath Tub.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES. TOP SUPPLY.

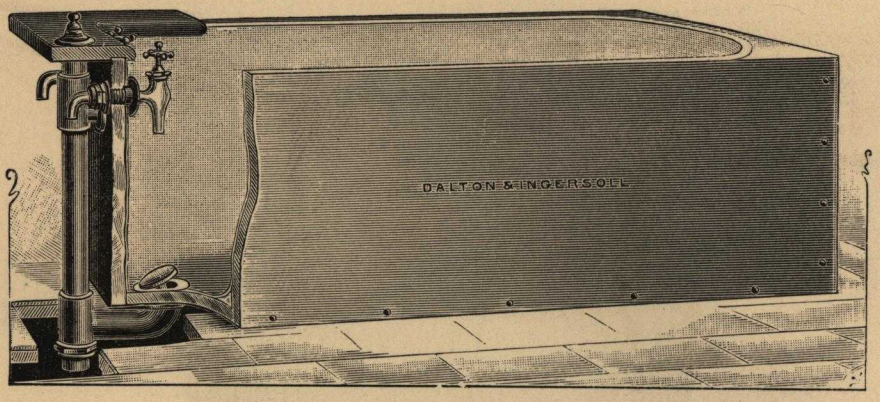


Plate 161.

Price, with Nickel-Plated Fixtures:

	12	14	16	18	20 oz
Regular Shape, 5, 5½, and 6 ft.	$36.00	$38.00	$40.00	$42.00	$44.00
French Shape, 4½ ft.	37.00	39.00	41.00	43.00	45.00
" " 5 ft.	39.00	41.00	43.00	45.00	47.00
" " 5½ ft.	41.00	43.00	45.00	47.00	49.00
Add for Silver-Plated Fixtures					6.00

Copper Bath Tub.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES. BOTTOM SUPPLY.

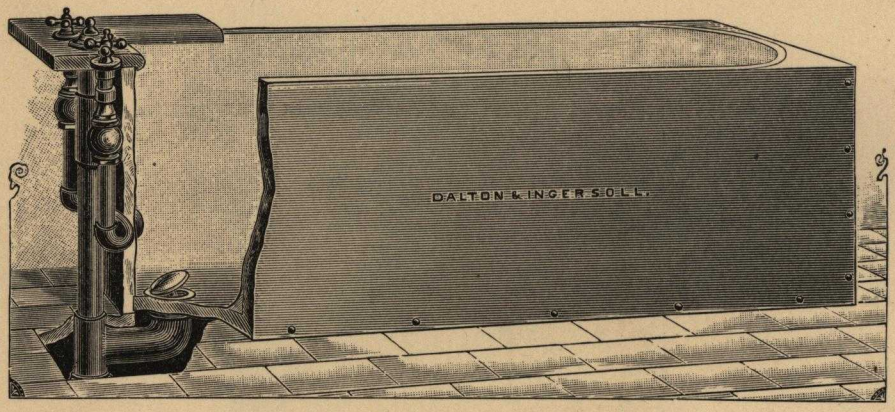


Plate 162.

Price, with Nickel-Plated Fixtures:

	12	14	16	18	20 oz.
Regular Shape, 5, 5½, and 6 ft.	$44.00	$46.00	$48.00	$50.00	$52.00
French Shape, 4½ ft.	45.00	47.00	49.00	51.00	53.00
" " 5 ft.	47.00	49.00	51.00	53.00	55.00
" " 5½ ft.	49.00	51.00	53.00	55.00	57.00
Add for Silver-Plated Fixtures					6.00

Enamelled Iron Bath Tub.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES. TOP SUPPLY.

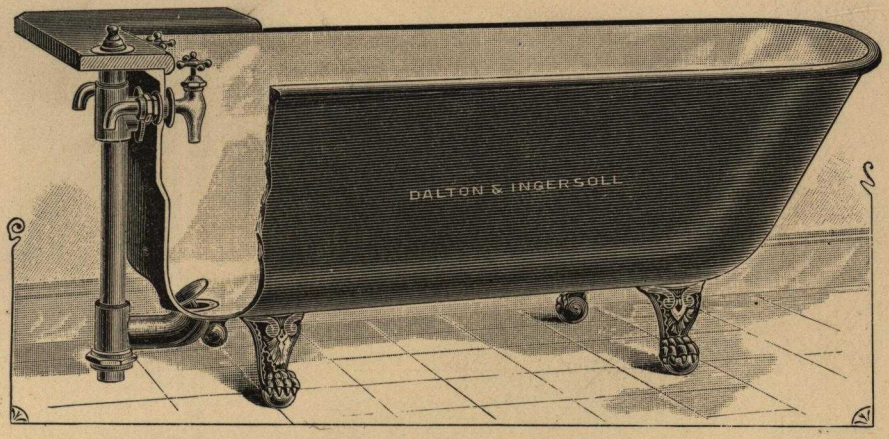


Plate 163.

	4	4½	5	5½	6 ft.
Price, with Nickel-Plated Fixtures	$51.00	$54.00	$58.00	$62.00	$66.00
Cherry, Walnut, or Oak Rim	8.00	9.00	10.00	11.00	12.00
Add for Silver-Plated Fixtures					6.00

Enamelled Iron Bath Tub.

WITH BOSTON PATENT WASTE AND SUPPLY FIXTURES. BOTTOM SUPPLY.

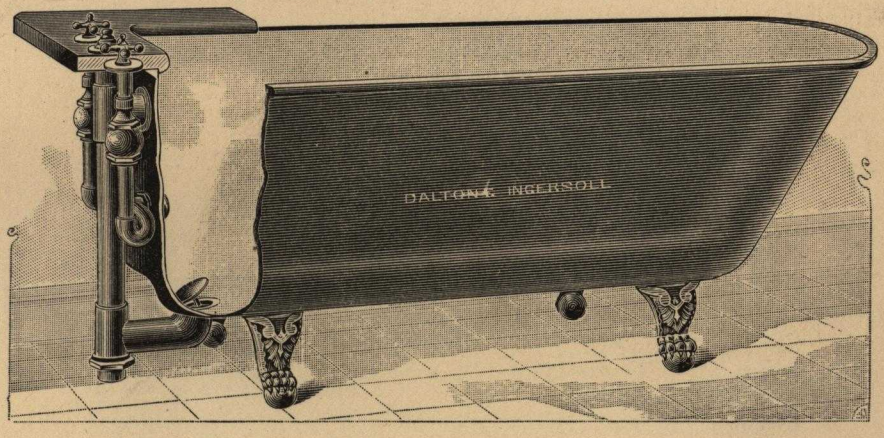


Plate 164.

	4	4½	5	5½	6 ft.
Price, with Nickel-Plated Fixtures	$59.00	$62.00	$66.00	$70.00	$74.00
Cherry, Walnut, Ash, or Oak Rim	8.00	9.00	10.00	11.00	12.00
Add for Silver-Plated Fixtures					6.00
Boxing Bath Tubs					$1.25 each, net.

Somerset Recessed Bath Tub.

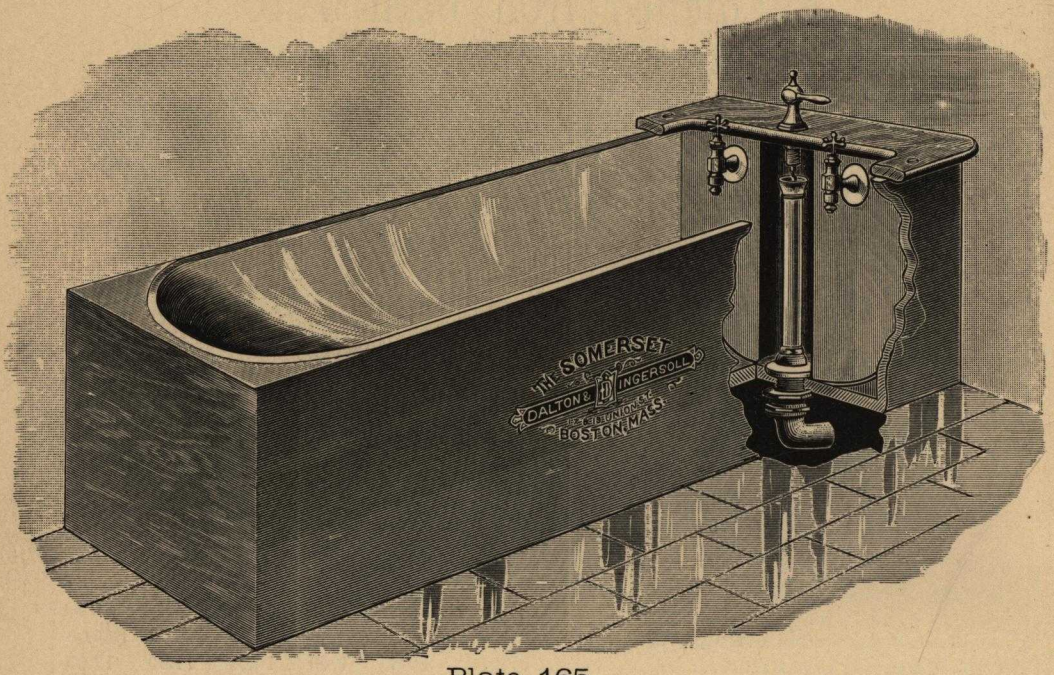


Plate 165.

	10	12	14	16	18	20 oz.
Price, Regular Shape, 5, 5½, or 6 ft.	$24.00	$26.00	$28.00	$30.00	$32.00	$34.00
" French Shape, 4½ ft.	26.00	28.00	30.00	32.00	34.00	36.00
" " " 5 ft.	28.00	30.00	32.00	34.00	36.00	38.00
" " " 5½ ft.	30.00	32.00	34.00	36.00	38.00	40.00

Somerset Recessed Copper Pantry Sink.

WITH NICKEL-PLATED FIXTURES.

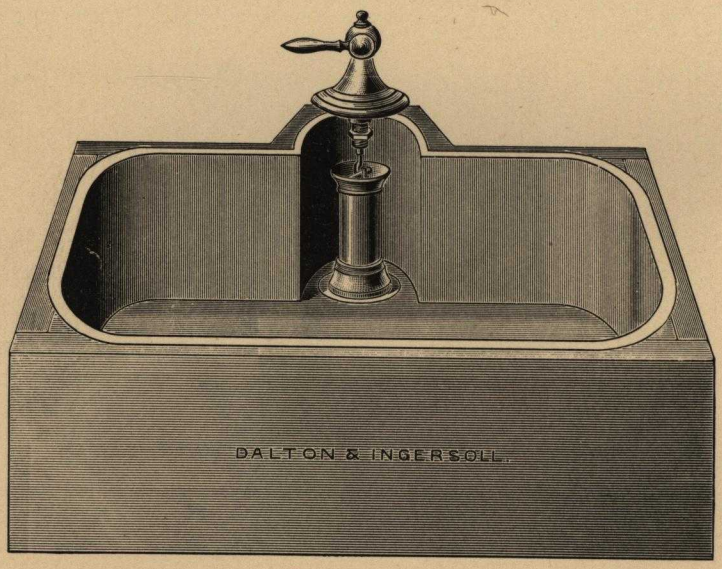


Plate 166.

	14 × 20	14 × 24	16 × 20	16 × 30	18 × 30 in.
Price, with Nickel-Plated Fixtures	$13.00	$14.00	$15.00	$17.00	$18.00

BOSTON SIPHON URINAL

AND

AUTOMATIC FLUSH CISTERN.

The Boston Siphon Urinal.

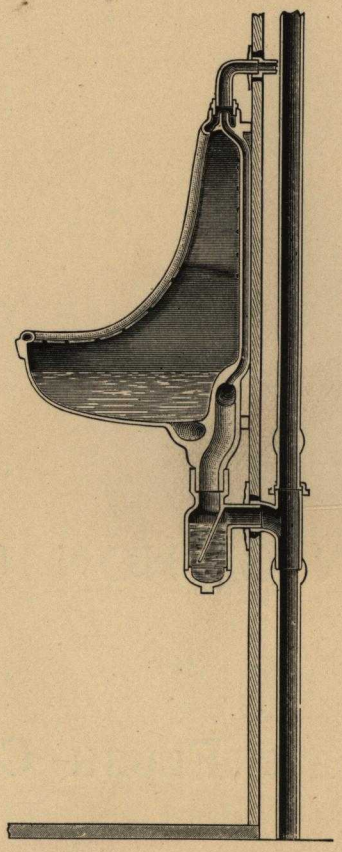


Plate 167.

This Urinal is constructed so as to hold a large pool of water and to discharge by siphonic action.

The outlet is full 1½ inch in diameter, which will allow any substance thrown into the Urinal not too large to pass through an opening of this size, to be discharged when the siphonic action takes place.

We claim that this Urinal can be kept cleaner than others, as it holds a pool of water to receive the urine and to dilute it, so that when it passes from the Urinal, the waste water flowing rapidly by siphonic action and in sufficient volume to fill the waste pipe, will thoroughly scour and prevent the accumulation of sediment in the pipe.

It will not be necessary to ventilate this Urinal as it has no exposed or hidden surface to become foul.

It may be operated either by an Automatic Cistern (see page 161) or from the street main direct (see page 160). By this latter method a perfect automatic system is secured, the amount of water to be supplied is regulated by the cocks placed over each Urinal.

When sufficient water has accumulated in the basin to overcome the column of air between the two traps, the siphonic action takes place and the contents are removed, after which the basin gradually refills, and the operation will be repeated as long as the water is allowed to run.

This state of affairs for public places will be readily appreciated, as there will always be a pool of water in the Urinal, whereas in other Urinals either a dry surface with an occasional flush, or a small stream of water trickling into the Urinal is all that is relied upon to clean the basin and waste pipe.

For public places, where a number of Urinals are desired in a row, a stop cock should be placed at a convenient point where the supply can be turned on or shut off by the person in charge when the building is closed (see page 160).

This Urinal can also be supplied by our No. 5 Sure Supply Cistern (see page 15). The Urinal being flushed in this case only when the user operates the valve by the pull and chain.

In all cases this Urinal must be provided with a trap directly under the urinal.

Boston Siphon Urinal.

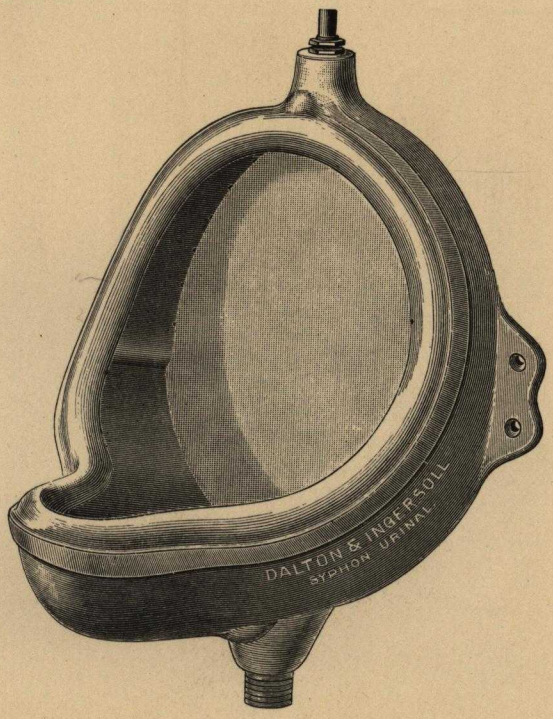


Plate 168.

Price, each, with Supply Couplings..... $11.00
" each, without Supply Couplings..... 10.00

For price of Brass Trap to be used with this Urinal, see page 193.
For price of Automatic Flush Cistern, see page 165.
In all cases this Urinal must be provided with a trap directly under the urinal.

The Boston Siphon Urinal.

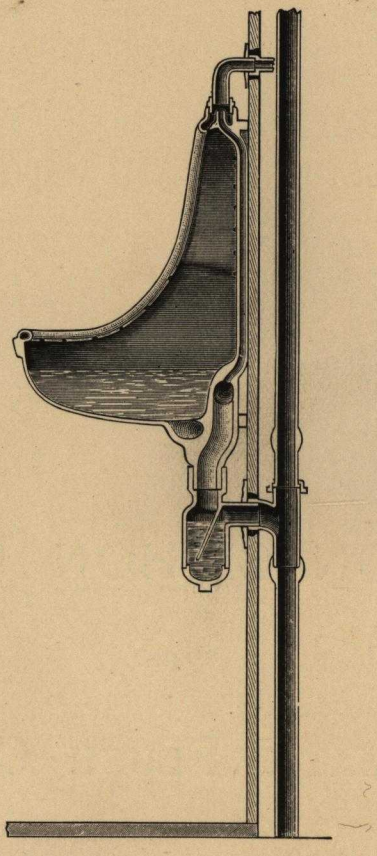


Plate 167.

This Urinal is constructed so as to hold a large pool of water and to discharge by siphonic action.

The outlet is full 1½ inch in diameter, which will allow any substance thrown into the Urinal not too large to pass through an opening of this size, to be discharged when the siphonic action takes place.

We claim that this Urinal can be kept cleaner than others, as it holds a pool of water to receive the urine and to dilute it, so that when it passes from the Urinal, the waste water flowing rapidly by siphonic action and in sufficient volume to fill the waste pipe, will thoroughly scour and prevent the accumulation of sediment in the pipe.

It will not be necessary to ventilate this Urinal as it has no exposed or hidden surface to become foul.

It may be operated either by an Automatic Cistern (see page 161) or from the street main direct (see page 160). By this latter method a perfect automatic system is secured, the amount of water to be supplied is regulated by the cocks placed over each Urinal.

When sufficient water has accumulated in the basin to overcome the column of air between the two traps, the siphonic action takes place and the contents are removed, after which the basin gradually refills, and the operation will be repeated as long as the water is allowed to run.

This state of affairs for public places will be readily appreciated, as there will always be a pool of water in the Urinal, whereas in other Urinals either a dry surface with an occasional flush, or a small stream of water trickling into the Urinal is all that is relied upon to clean the basin and waste pipe.

For public places, where a number of Urinals are desired in a row, a stop cock should be placed at a convenient point where the supply can be turned on or shut off by the person in charge when the building is closed (see page 160).

This Urinal can also be supplied by our No. 5 Sure Supply Cistern (see page 15). The Urinal being flushed in this case only when the user operates the valve by the pull and chain.

In all cases this Urinal must be provided with a trap directly under the urinal.

Boston Siphon Urinal.

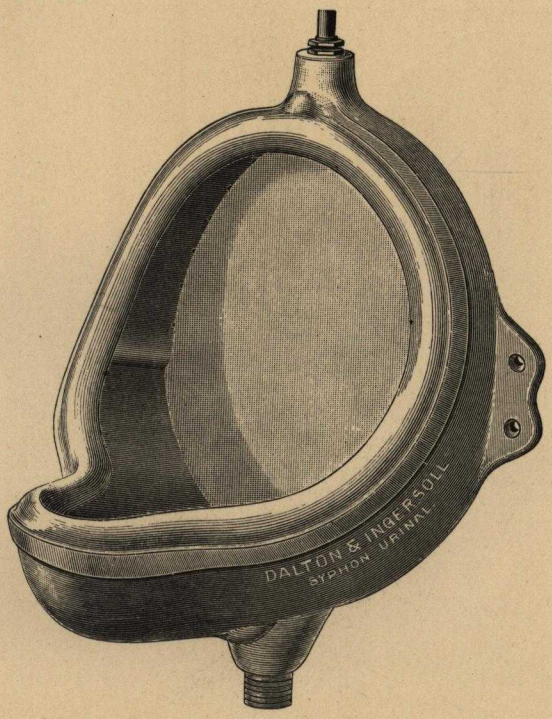


Plate 168.

Price, each, with Supply Couplings	$11.00
" each, without Supply Couplings	10.00

For price of Brass Trap to be used with this Urinal, see page 193.
For price of Automatic Flush Cistern, see page 165.
In all cases this Urinal must be provided with a trap directly under the urinal.

Boston Siphon Urinals.

SUPPLIED FROM STREET MAIN. WORKING AUTOMATICALLY.

Plate 169.

Price of set, including Urinal, Supply Cocks and Brass Trap, as shown..... $19.00

Any number of Urinals may be placed in a row and flushed by this system.

For further description, see page 158.

The features of this system are cleanliness, absolute freedom from all odors, and a perfect automatic apparatus which is necessary in all public places, as the public cannot be relied upon to operate the usual fixture that is usually provided to flush Urinals.

Urinals

WITH AUTOMATIC FLUSHING CISTERN.

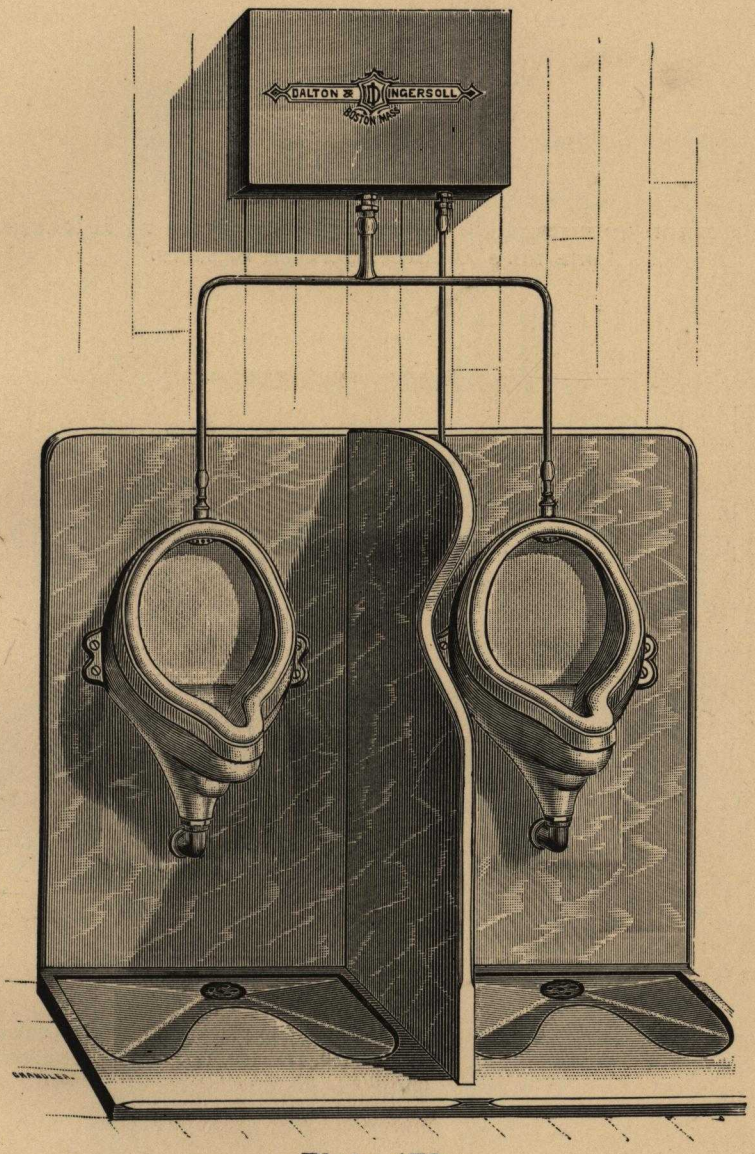


Plate 170.

Any number of Urinals may be placed in a row and flushed from one or more of the cisterns.

No. 1 Automatic Cistern is suitable for one urinal.
No. 3 " " " " " two to four urinals.
No. 5 " " " " " three to five "
No. 7 " " " " " six urinals.
No. 9 " " " " " six "
No. 10 " " " " " eight "

For description and price of Urinals, see pages 159, 175, 176, 177. For description and price of Cisterns, see page 165.

Sectional Cut

SHOWING METHOD OF FITTING UP FOUR OR MORE URINALS TO BE FLUSHED FROM ONE NO. 3 AUTOMATIC FLUSH CISTERN.

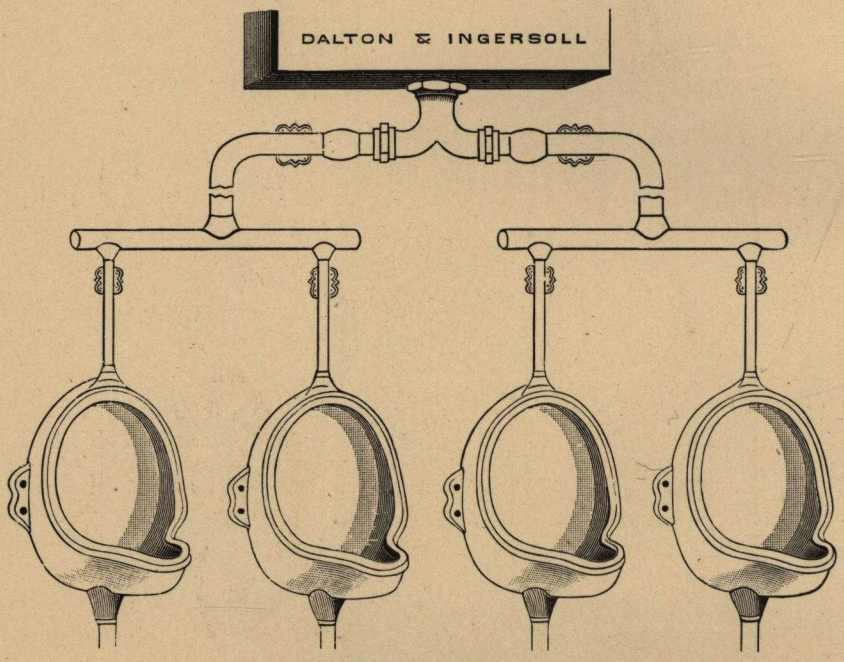


Plate 171.

If five or six Urinals are to be fitted up, No. 7 Automatic Flush Tank should be used.

For description and price of Urinal, see pages 159, 175, 176, 177. For description and price of Cisterns, see page 165.

Fittings for Earthen Urinal.

SUPPLY URINAL OFFSETS,
¾ × ⅞ Brass Pipe.

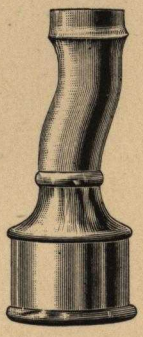


Plate 172.

Price, each, Brass..... $0.75
Price, each, Nickel-Plated..... 1.00

SUPPLY URINAL BEND,
With Flange and Coupling.

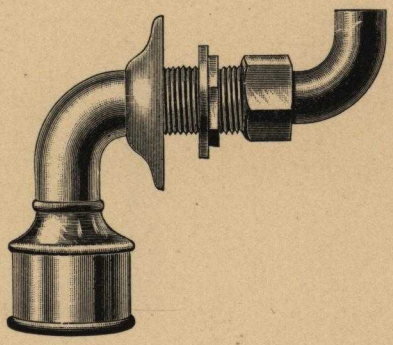


Plate 173.

Price, each, Brass..... $1.50
Price, each, Nickel-Plated..... 1.75

URINAL COCK.

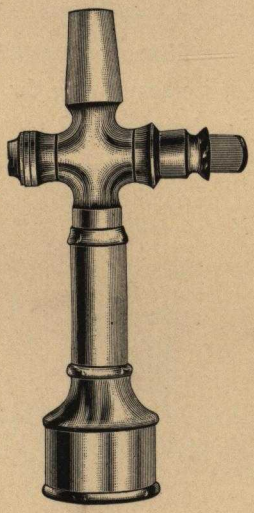


Plate 174.

Price, each, Brass..... $1.50
Price, each, Nickel-Plated..... 2.00

URINAL COCK,
With Flange and Coupling.

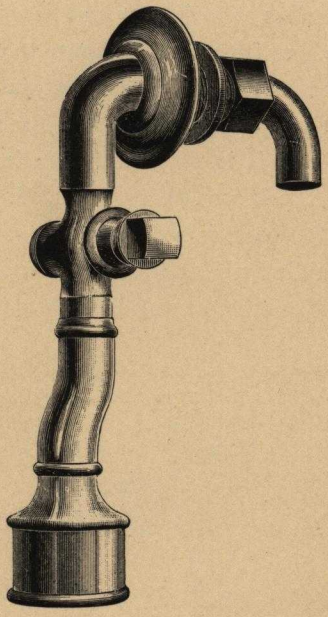


Plate 175.

Price, each, Brass..... $4.50
Price, each, Nickel-Plated..... 5.50

For Urinal outlet Coupling and Traps, see page 193.

[PATENT APPLIED FOR.]

DALTON & INGERSOLL'S

Automatic Siphon Flush Cistern.

COPPER-LINED.

We claim for this Cistern a perfect apparatus for flushing Urinals and Hoppers automatically.

It is noiseless and effective and can be easily regulated so as to give the full discharge anywhere from once a minute to once a day as desired.

There are no parts to wear or get out of order, and when once regulated by the set screw on the ball cock will give the discharges with unvarying regularity.

For Urinals it is particularly desirable, as it is a well-known fact that Urinals supplied by a cock soon become foul, for the reason that persons using the fixture will not operate the cock to wash out the deposit, and it has been proved by actual count in a large public building that nine out of ten fail to flush the Urinal.

It is applicable to any style known, the slab, trough, or earthenware Urinal.

Automatic Siphon Flush Cistern.

COPPER-LINED.

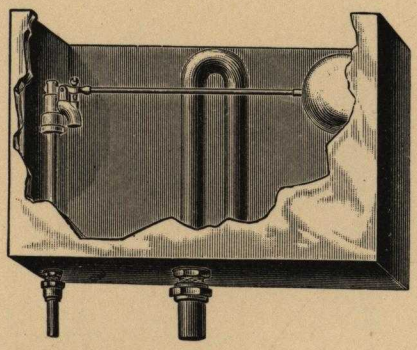


Plate 176.

Price,	No. 1,	Capacity	1	gal.,	Single	Coupling	$11.00
"	No. 2,	"	2	"	"	"	11.00
"	No. 3,	"	2	"	Double	"	12.00
"	No. 4,	"	3	"	Single	"	11.00
"	No. 5,	"	3	"	Double	"	12.00
"	No. 6,	"	4	"	Double	"	18.00
"	No. 7,	"	4	"	Triple	"	19.00
"	No. 8,	"	5	"	Double	"	19.00
"	No. 9,	"	5	"	Triple	"	20.00
"	No. 10,	"	6	"	Double	"	20.00

Double Coupling,

Used on

AUTOMATIC FLUSHING CISTERN.

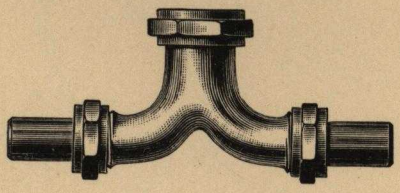


Plate 177.

Triple Coupling,

Used on

AUTOMATIC FLUSHING CISTERN.

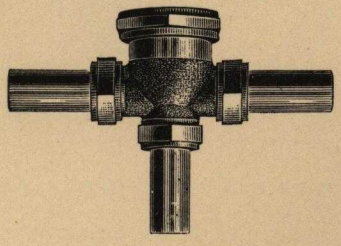


Plate 178.

Hopper

WITH AUTOMATIC FLUSHING CISTERN.

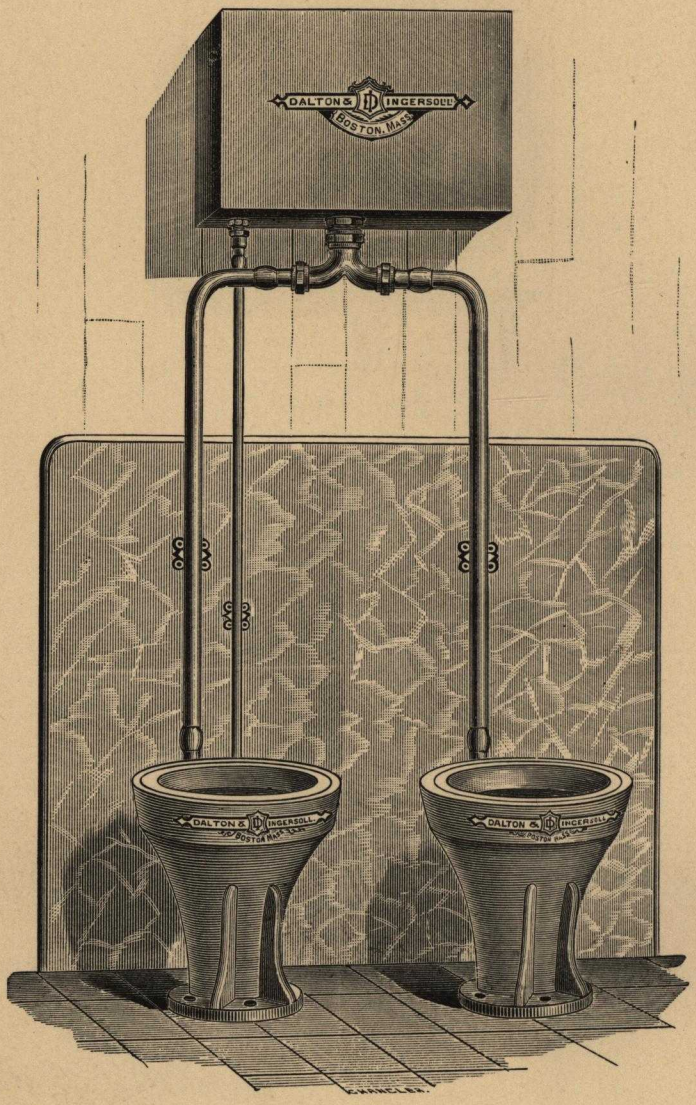


Plate 179.

Any number of hoppers may be placed in a row and flushed from one or more of these cisterns.

No. 6 Automatic Cistern suitable for 2 hoppers.
No. 10 " " " " 4 "

For price of Hopper, see pages 125 to 133. For description and price of Cistern, see page 164.

Earthenware Slop Safe.

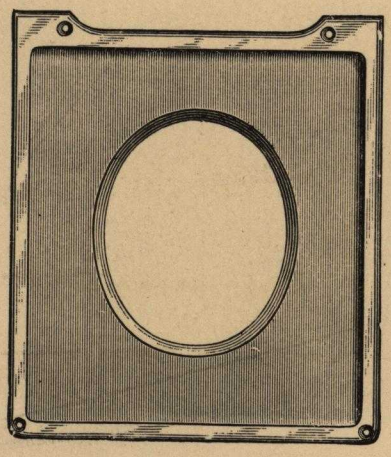


Plate 180.

Price $2.50

These Safes can be used in connection with any of our hoppers and wash-out closets.

Enamelled Slop Safe.

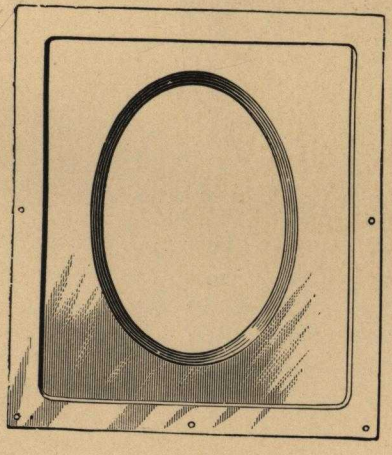


Plate 181.

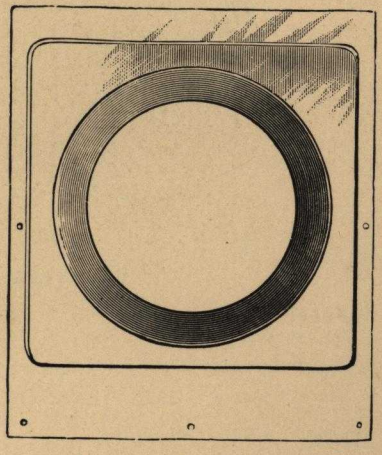


Plate 182.

Price $1.50

These Safes can be used with our hoppers and wash-out closets.

Copper Bath Tubs.

REGULAR PATTERN.

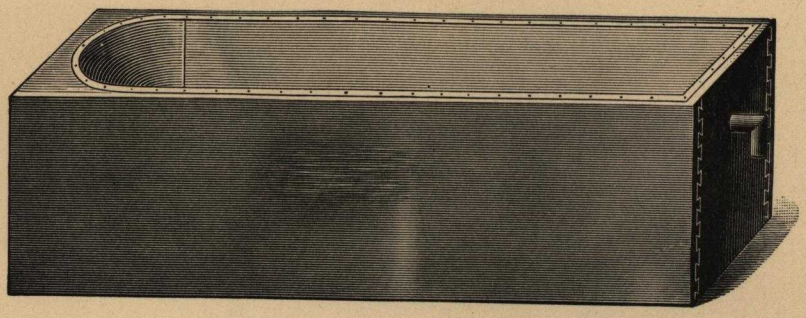


Plate 183.

Weight of Copper,	10	12	14	16	18	20 oz.
4½, 5, 5½, or 6 feet, each	$15.00	$16.00	$18.00	$20.00	$22.00	$24.00

FRENCH PATTERN.

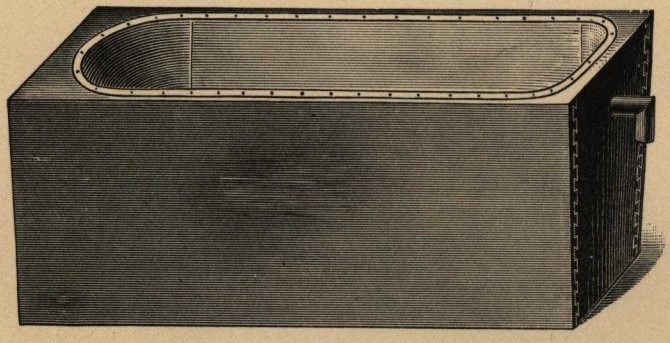


Plate 184.

Weight of Copper,	10	12	14	16	18	20 oz.
Size 4½ ft., each	$16.00	$17.00	$19.00	$21.00	$23.00	$25.00
" 5 ft., each	18.00	19.00	21.00	23.00	25.00	27.00
" 5½ ft., each	20.00	21.00	23.00	25.00	27.00	29.00
" 6 ft., each	22.00	23.00	25.00	27.00	29.00	31.00

Seat Tub.

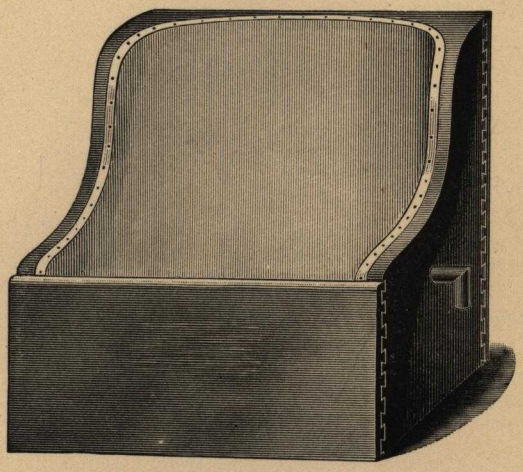


Plate 185.

Foot Tub.

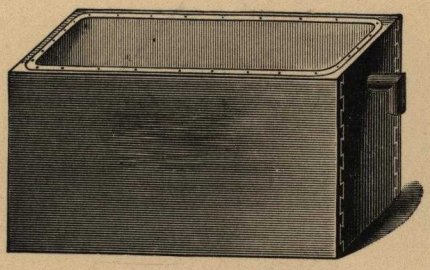


Plate 186.

Weight of Copper,	10	12	14	16	18	20 oz.
Seat Tubs	$10.00	$11.00	$12.00	$13.00	$14.00	$15.00
Foot Tubs	7.50	8.50	9.50	10.50	11.50	12.50

Copper Pantry Sinks.

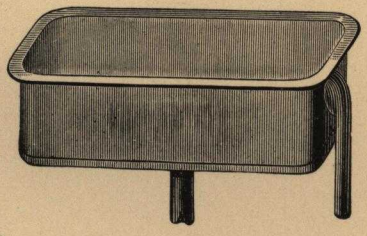


Plate 187.

Plate 188.

Size,	12×18	12×20	14×16	14×20	14×24	16×24	16×30	18×30 in.
Square Bottom	$4.50	$5.00	$4.50	$6.00	$7.00	$8.00	$10.00	$11.00
Oval Bottom	6.00	6.50	6.00	7.50	9.00	10.00	12.00	13.00

Copper Work, Etc.

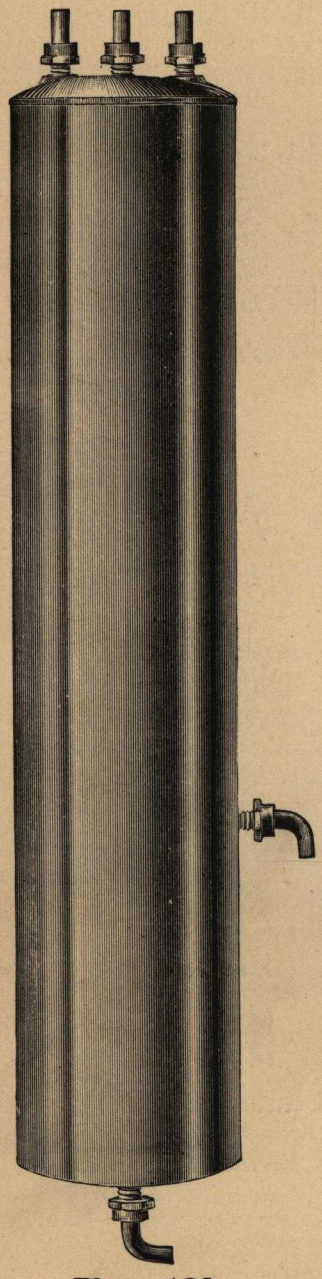


Plate 189.

Copper Boilers.

Gal.	Height.	Diam.	Cistern Pressure.	Heavy Pressure.
30	5 ft.	12 in.		
40	5 "	14 "		
50	5 "	16 "		
60	5 "	17 "	Prices	
70	5 "	18 "	on application.	
80	5 "	20 "		
90	5½ "	20 "		
100	6 "	20 "		

All Couplings are furnished for lead pipe, unless otherwise ordered.

Special size Boilers made to order.

Boiler Stands.

Height, 21 inches.

Price, Plain, each:

Size,	12	13	14	15	16	17	18	20	22	24	in.
	$1.25	$1.30	$1.40	$1.50	$1.75	$1.85	$2.00	$2.25	$2.75	$3.50	

Price, Galvanized, each:

$2.50	$2.60	$2.70	$3.00	$3.25	$3.60	$3.80	$4.50	$5.00	$6.50

THE BROWN & BROS. SEAMLESS COPPER

House Boilers.

Tested at 200 lbs. Internal Pressure to the square inch. Guaranteed not to collapse.

Capacity.	Height.	Diameter.	Price.
30 gal.	60 in.	12 in.	$30.00
35 "	53 "	14 "	35.00
40 "	60 "	14 "	40.00
45 "	68 "	14 "	45.00
50 "	60 "	16 "	50.00
60 "	70 "	16 "	60.00

Boilers can be furnished with either two or three Couplings on top.

All Couplings are furnished for lead pipe, unless otherwise ordered.

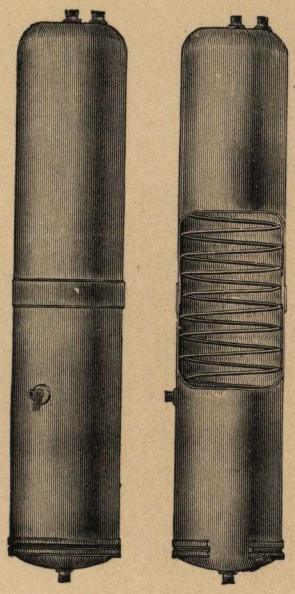


Plate 190.

Galvanized Iron Range Boilers.

Capacity.	Height.	Diameter.	Price.
18 gal.	3 ft.	12 in.	$14.50
21 "	3½ "	12 "	15.50
24 "	4 "	12 "	15.75
24 "	3 "	14 "	19.00
27 "	4½ "	12 "	18.50
28 "	3½ "	14 "	20.25
30 "	5 "	12 "	19.00
32 "	4 "	14 "	21.00
35 "	5 "	13 "	21.00
36 "	6 "	12 "	24.50
36 "	4½ "	14 "	21.50
40 "	5 "	14 "	24.00
42 "	4 "	16 "	26.00
47 "	4½ "	16 "	30.00
48 "	6 "	14 "	30.00
52 "	5 "	16 "	31.00
53 "	4 "	18 "	31.50
63 "	6 "	16 "	38.00
66 "	5 "	18 "	38.00
79 "	6 "	18 "	44.00
82 "	5 "	20 "	45.50
98 "	6 "	20 "	61.50
100 "	5 "	22 "	63.50
120 "	6 "	22 "	74.00
120 "	5 "	24 "	72.50
144 "	6 "	24 "	103.00
168 "	7 "	24 "	120.00
192 "	8 "	24 "	132.00

Other sizes made to order.

Add to above prices for Couplings and Tube, when furnished, $2.00 net.

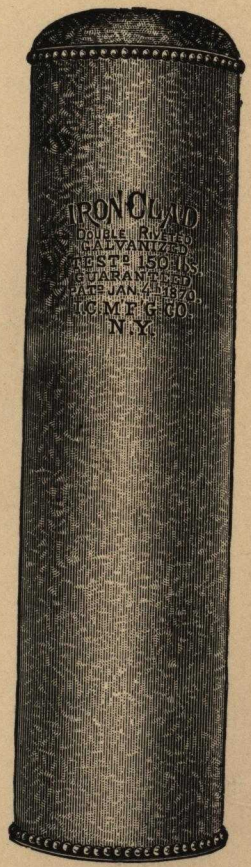


Plate 191.

Wash Basins.

COMMON OVERFLOW. MARBLED.

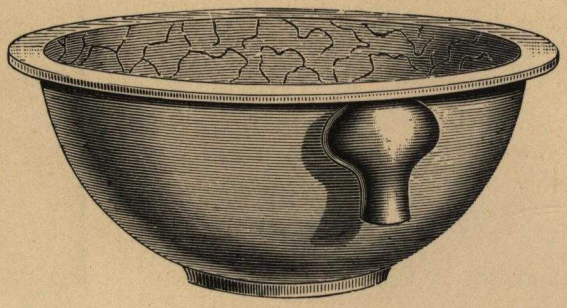


Plate 192.

		Outside Measure,	12	13	14	15	16	17	18 in.
Imported.	Marbled, with Overflow	.....	$1.35	$1.50	$1.55	$2.25	$3.00	$5.00	$6.00
American.	" with "	.....	1.05	1.25	1.40	2.00	2.75		
"	" without "	.....	.80	1.00	1.15	1.80	2.25		

PATENT OVERFLOW. MARBLED.

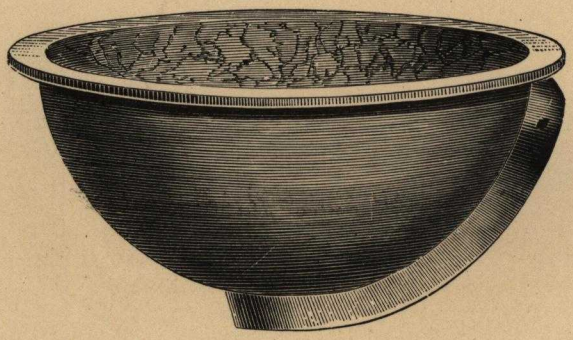


Plate 193.

		Outside Measure,	12	13	14	15	16 in.
Imported.	Marbled	.....	$1.50	$1.70	$1.80	$2.75	$3.25
American.	"	.....	1.15	1.30	1.50	2.25	3.00

Oval Wash Basin.

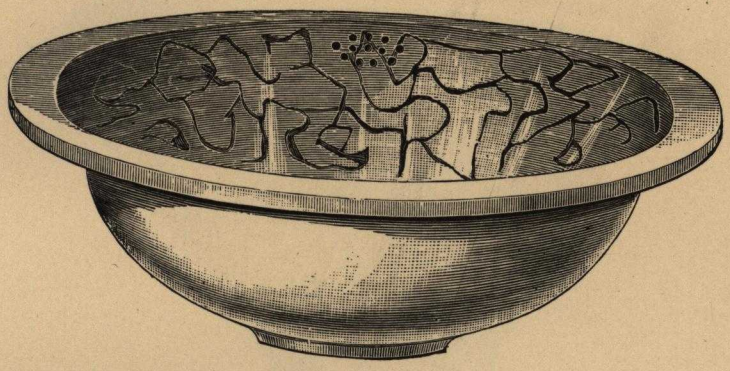


Plate 194.

Outside Measure,	14 × 17	15 × 19	16 × 20 in.
Imported. Marbled, with and without Overflow	$3.00	$3.50	$4.50
American Ware, " " "	3.50	5.00	6.00
American Ware, with patent Overflow	3.80	5.30	6.30

Earthen Sinks.

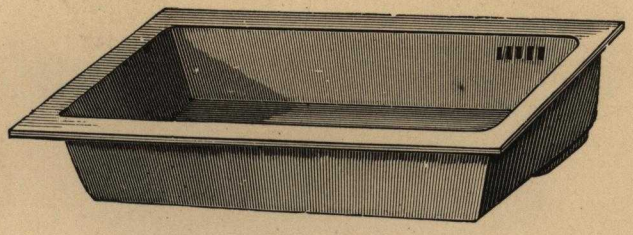


Plate 195.

Size,	12 × 20	14 × 20	16 × 23	17 × 24	17 × 25 in.
White	$9.00	$9.50	$10.50	$12.50	$13.50

Closet Basin.

OVAL PATTERN.

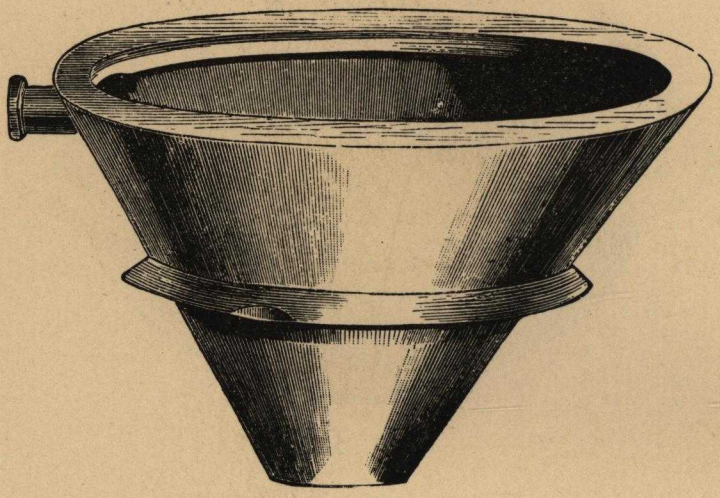


Plate 196.

Imported.	White	$2.00
American.	"	1.65

FRENCH PATTERN.

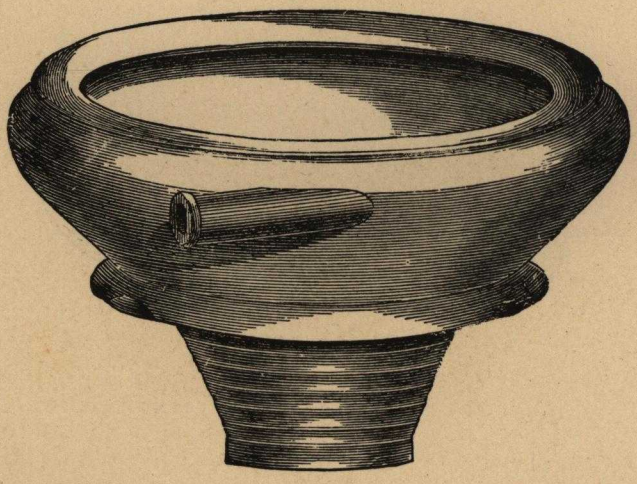


Plate 197.

Imported.	White	$1.85
American.	"	1.45

Flat Bedfordshire Urinals.

LIPPED. WITH VENTILATING HOOD.

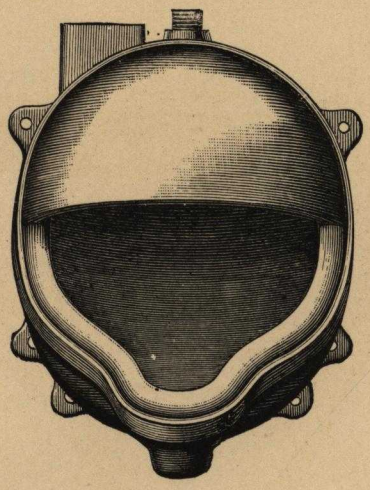


Plate 198.

No. 1, size 15 × 18 inches $13.00
No. 2, size 12 × 15 inches 16.00

Angle Bedfordshire Urinals.

LIPPED. WITH VENTILATING HOOD.

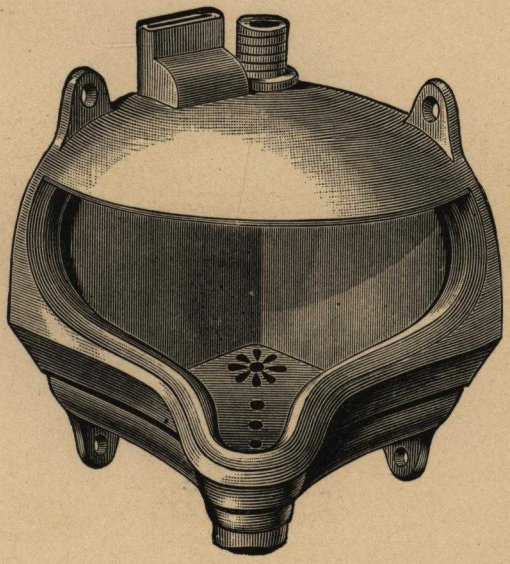


Plate 199.

No. 1, large size..... $13.00
No. 2, small size 16.00

Flat Bedfordshire Urinals.

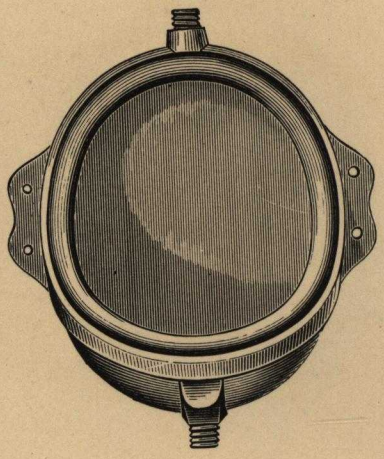


Plate 200.

No. 1, size 15 × 18 inches	$6.90
No. 2, size 12 × 15 inches	5.25
No. 3, size 11½ × 14 inches	4.85

LIPPED.

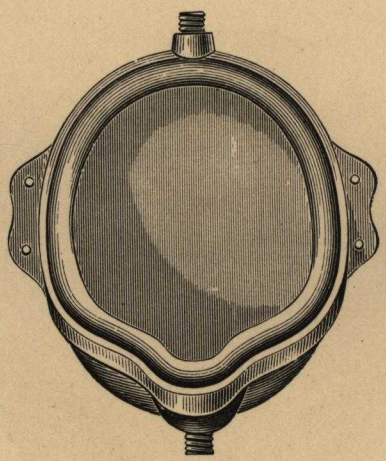


Plate 201.

Large size, 15 × 18 inches	$10.00
Small size, 12 × 15 inches	8.25

Angle Bedfordshire Urinals.

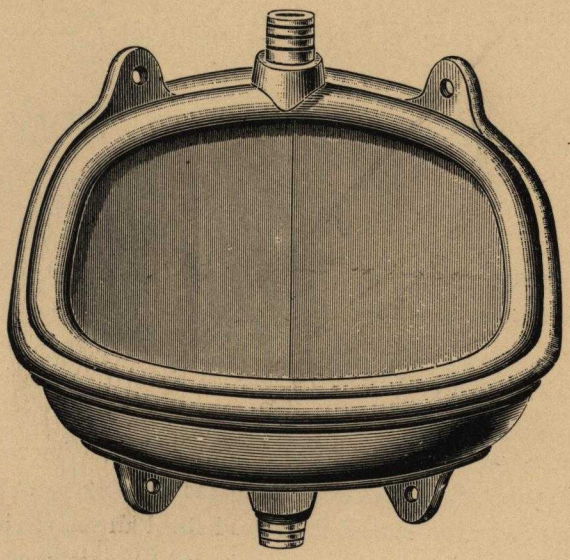


Plate 202.

No. 1, 12 × 12 inches	$6.90
No. 2, 11 × 11 inches	5.25
No. 3, 10¼ × 10¼ inches	4.85

LIPPED.

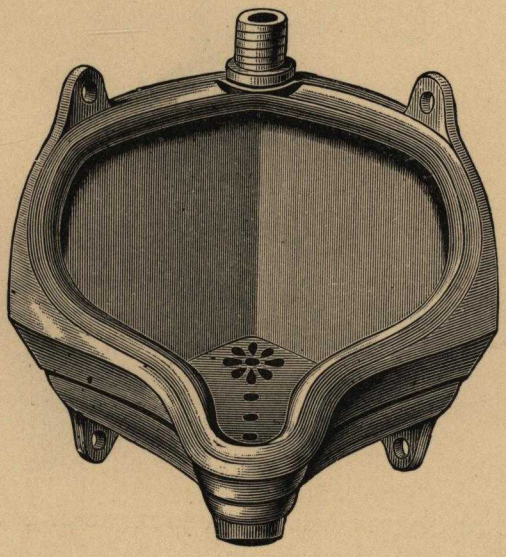


Plate 203.

Large size	$10.00
Small size	8.25

THE DALTON & INGERSOLL

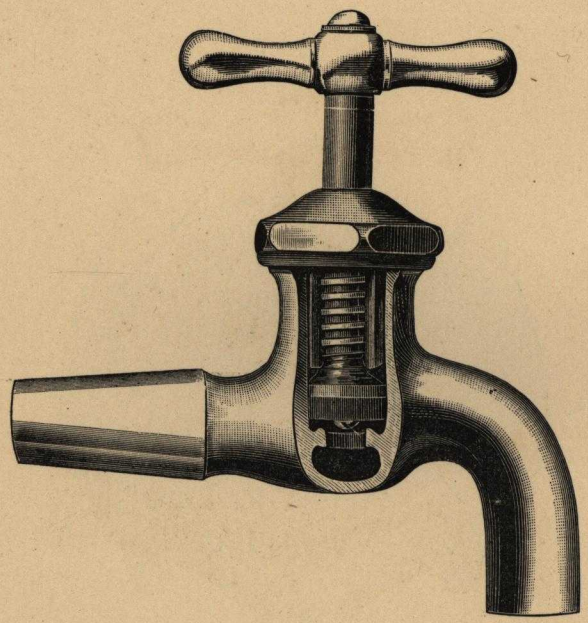
Special Compression Work.

The close competition of late years on this class of goods has been very detrimental to quality and workmanship, and to such an extent that there is an increasing demand for something better.

The small extra cost of the Dalton & Ingersoll Special Goods is more than offset by the durability.

Besides the better quality and workmanship we claim an improvement in the construction, all the threads being in contact during the opening and closing of the valve, when in the ordinary make the ends of the thread stand all the strain and wear.

By this method of construction the valve is brought squarely on its seat, closing the faucet tightly, without the severe pressure which is necessary in other makes, and which soon cuts out the washer, causing it to leak.



SECTIONAL CUT OF THE DALTON & INGERSOLL SPECIAL BIBB.

Compression Plain Bibbs. D. & I. Special.

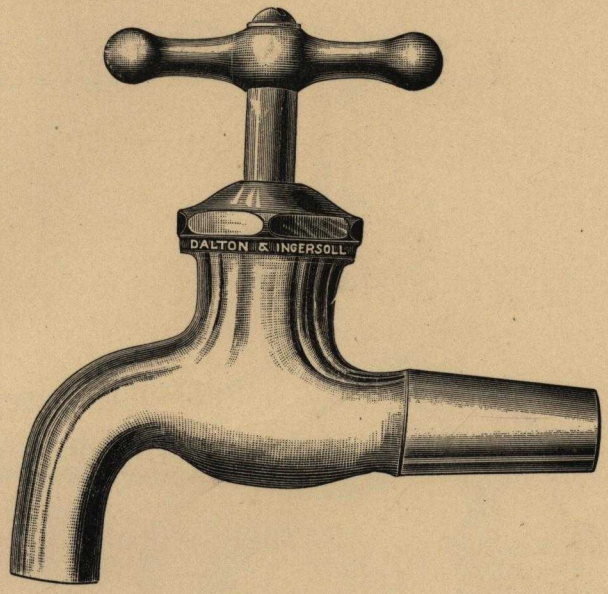


Plate 204.

	Size,	½	⅝ in.
Price, Finished, per dozen		$10.00	$12.00
" Nickel-Plated "		12.50	14.50

SCREWED FOR IRON PIPE.

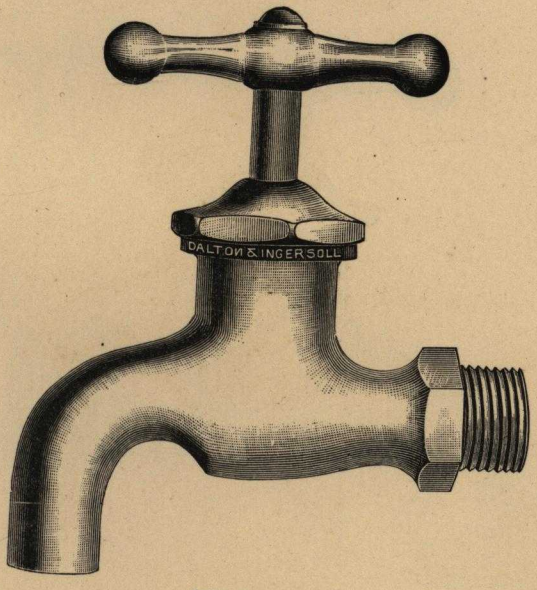


Plate 205.

	Size,	½	⅝ in.
Price, Finished, per dozen		$11.00	$13.00
" Nickel-Plated "		13.00	15.50

In specifying, call for the Dalton & Ingersoll Special.

Compression Hose Bibbs. D. & I. Special.

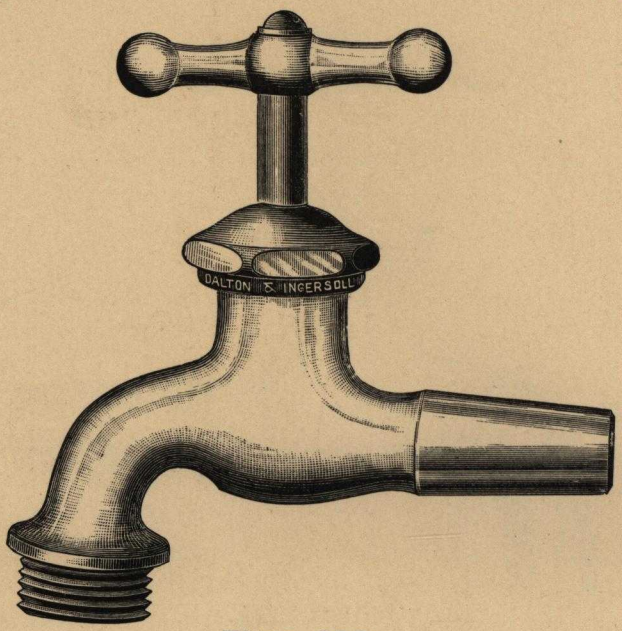


Plate 206.

	Size,	½	⅝ in.
Price, Finished, per dozen		$11.00	$13.00
" Nickel-Plated "		13.50	15.50

SCREWED FOR IRON PIPE.

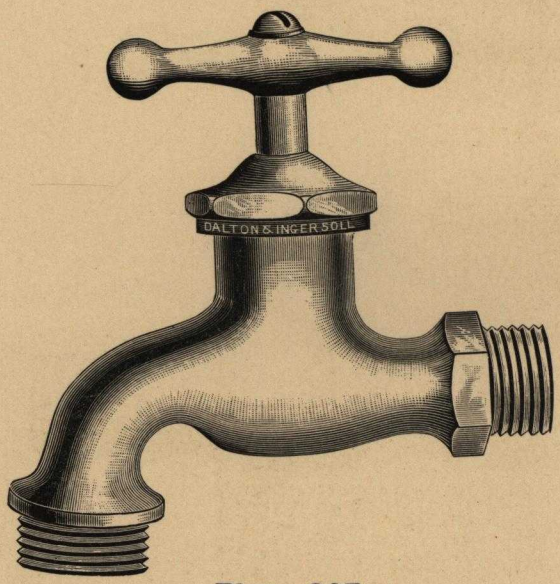


Plate 207.

	Size,	½	⅝ in.
Price, Finished, per dozen		$12.00	$14.00
" Nickel-Plated "		14.50	16.50

In specifying, call for the Dalton & Ingersoll Special.

Compression Bibbs. D. & I. Special.

WITH STUFFING NUT.

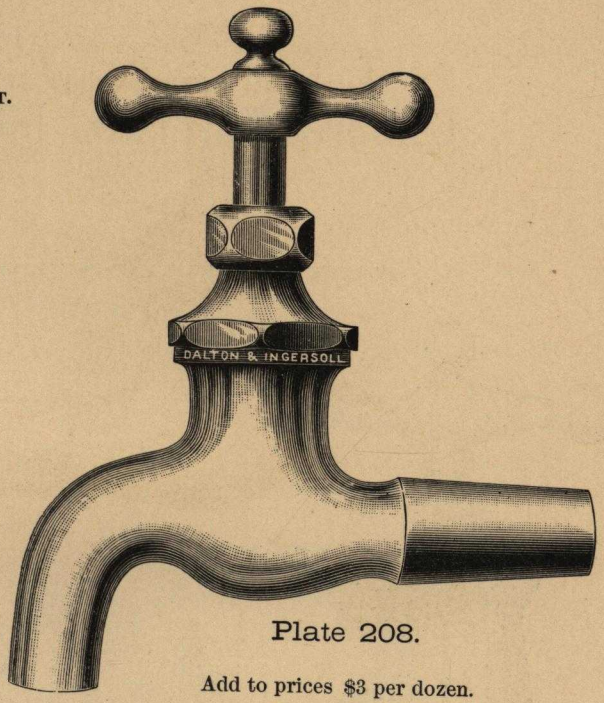


Plate 208.

Add to prices $3 per dozen.

Compression Plain Bibbs.

WITH FLANGE AND ELBOW.

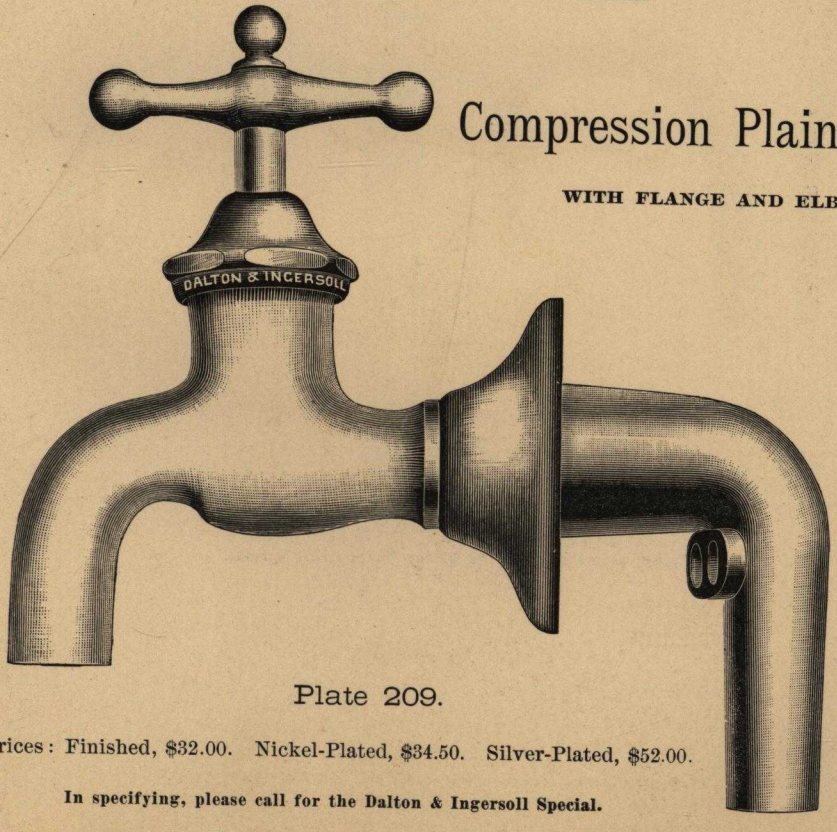


Plate 209.

Prices: Finished, $32.00. Nickel-Plated, $34.50. Silver-Plated, $52.00.

In specifying, please call for the Dalton & Ingersoll Special.

Compression Bath Bibbs.

D. & I. Special.

FLANGE, NUT, AND BENT COUPLING.

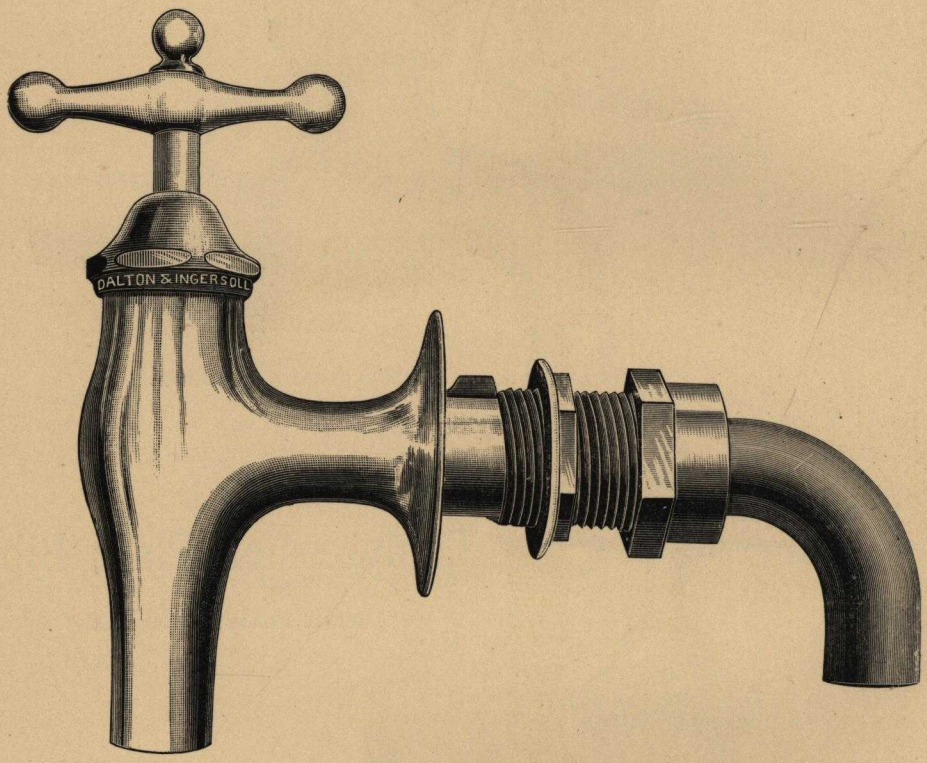


Plate 210.

Size, ¾ inch.

Price, Finished	$52.00
" Nickel-Plated	57.00
" Silver-Plated	72.00

In specifying, please call for the Dalton & Ingersoll Special.

Compression Basin Cock.

D. & I. Special.

WITH STUFFING NUT.

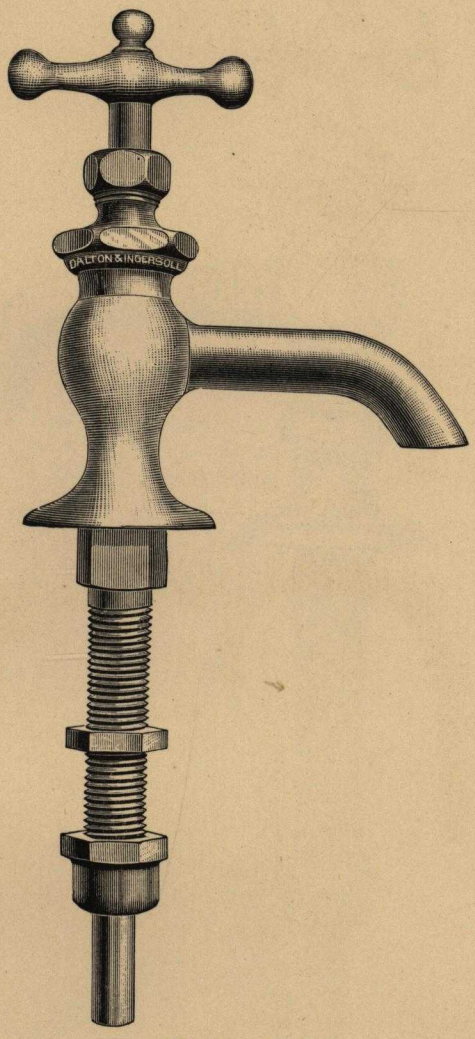


Plate 211.

	Finished.	Nickel-Plated.	Silver-Plated.
Price, per dozen	$22.50	$25.00	$45.00

In specifying, please call for the Dalton & Ingersoll Special.

Compression Basin Cock.

D. & I. Special.

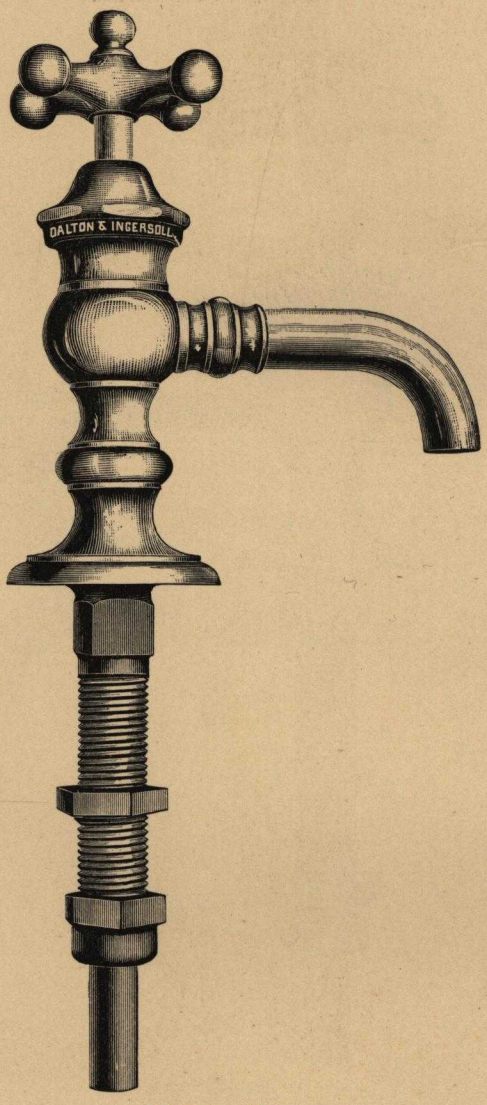
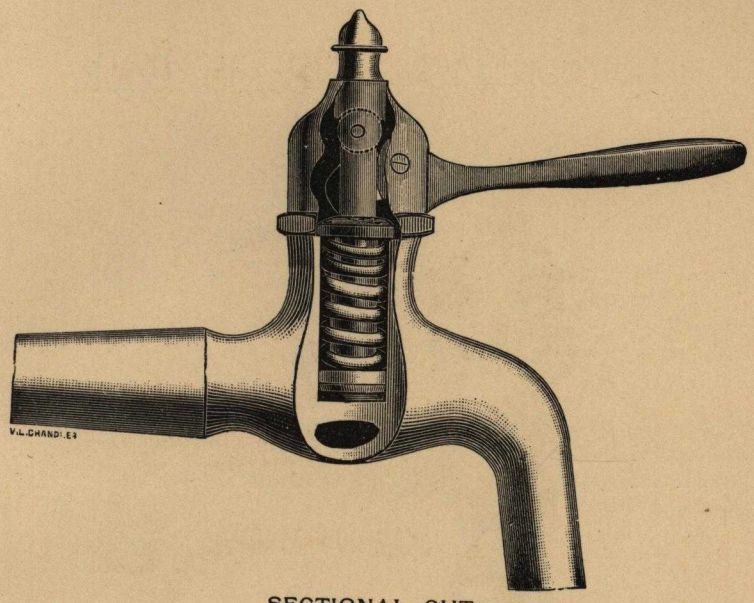


Plate 212.

	Finished.	Nickel-Plated.	Silver-Plated.
Price, per dozen	$27.50	$30.00	$50.00

In specifying, call for the Dalton & Ingersoll Special.

I. S. Self-Closing Bibbs and Basin Cocks.



SECTIONAL CUT.

The Stem is all one piece, and runs through the top of the cap, which serves as a guide, insuring a direct lift. The roller in the Stem prevents friction, making one of the easiest working S. C. Cocks in the market. The Spring is made of Phosphor Bronze, and will not lose its elasticity.

I. S. Self-Closing Bibb.

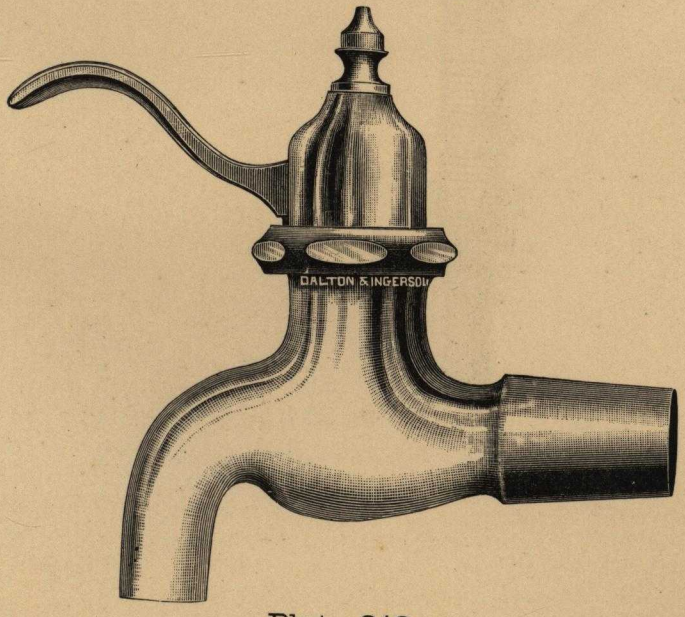


Plate 213.

For prices, see next page.

I. S. Self-Closing Basin Cock.

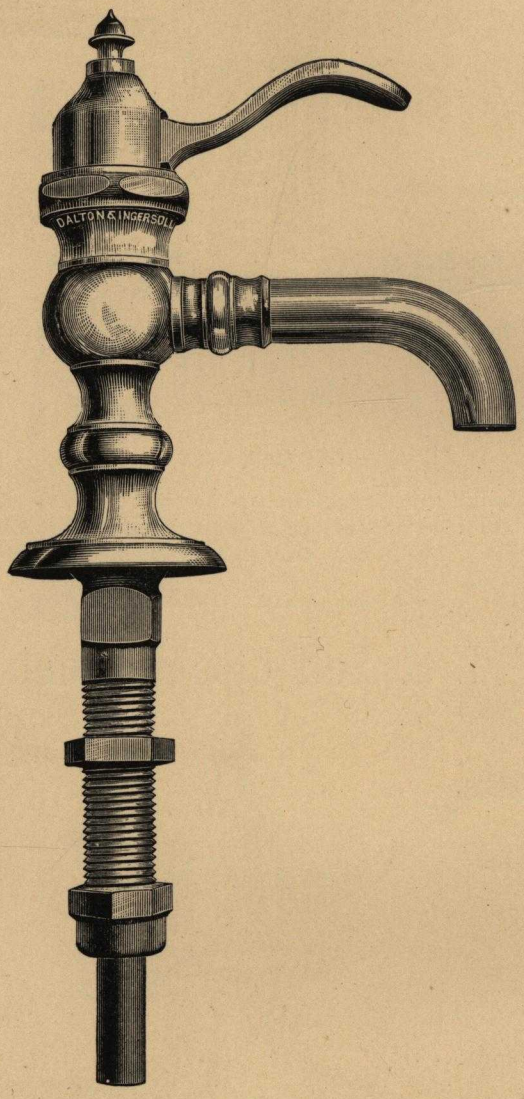
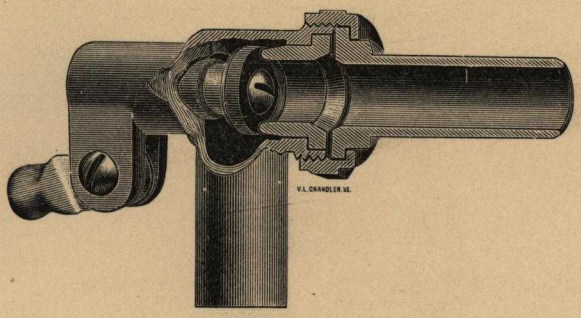


Plate 214.

	Finished.		Nickel-Plated.		
	½	⅝	½	⅝	in.
Price, Plain Bibbs, Lead Pipe	$24.00	$27.00	$37.50	$40.00	
" Plain Bibbs, Iron Pipe	27.00	30.00	40.00	45.00	
" Plain Bibbs, Flange and Thimble	34.00	37.50	48.00	52.00	
" Hose Bibbs, Lead Pipe	27.00	30.00	40.00	45.00	
" Hose Bibbs, Iron Pipe	30.00	33.00	45.00	48.00	
" Hose Bibbs, Flange and Thimble	38.00	41.00	52.00	56.00	
Basin Cocks	$42.00		$48.00		

Improved Renewable Seat Ball Cock.



This Ball Cock is constructed with a removable Seat made of the best steam metal, our object being to furnish a Ball Cock which will not readily cut out at the seat, as well as one in which the seat or washer can be replaced in case it should become worn or cut, without the necessity of disturbing the pipe or tearing down wood work and marring the finish around the cistern.

The seats are all made to a gauge, and new ones can be readily placed in position.

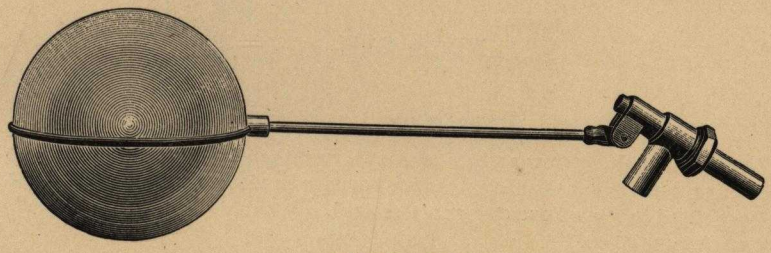


Plate 215.

Price, ½ inch, for Lead Pipe, per dozen $12.50
" ½ inch, for Iron Pipe, " 12.50

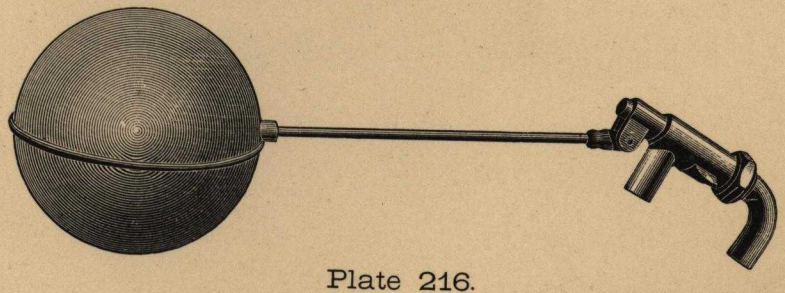


Plate 216.

Price, ½ inch, for Lead Pipe, with Ears and Bent Couplings, per dozen $15.00

DALTON & INGERSOLL

Balanced Ball Cock.

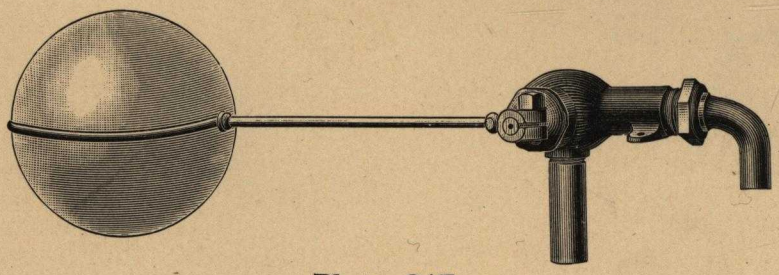


Plate 217.

Price, per dozen..... $33.75

This Ball Cock is suitable for low or high pressure, working equally as well on either.
It is quick-acting, noiseless, and will not water, hammer or vibrate under the heaviest pressure.
This Ball Cock fitted to any of our cisterns if desired.
Add to list of cisterns $1.50.

Farnan Patent Stop and Waste Cocks.

LEVER HANDLE FOR LEAD PIPE.

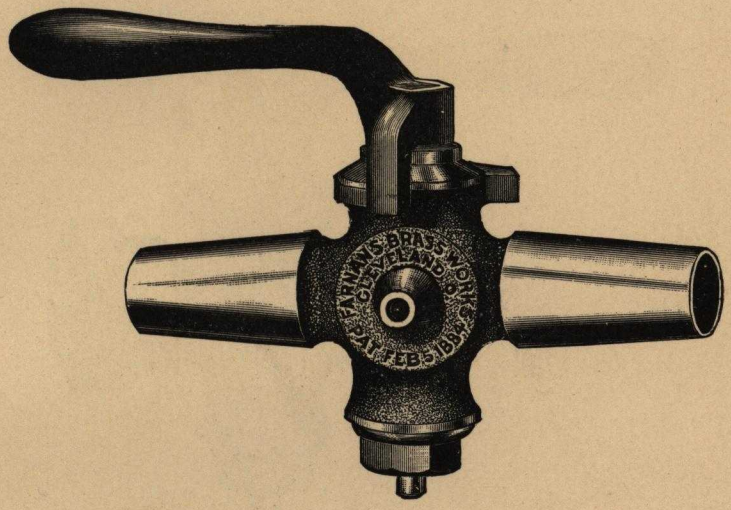


Plate 218.

	½	⅝	¾	1 in.
Price, for Lead Pipe S. & W., Flat Way	$13.00	$16.00	$20.50	$30.00
" for Lead Pipe S. & W., Round Way	18.00	21.00	26.50	46.00

CLAMP OR TEE HANDLE FOR LEAD PIPE.

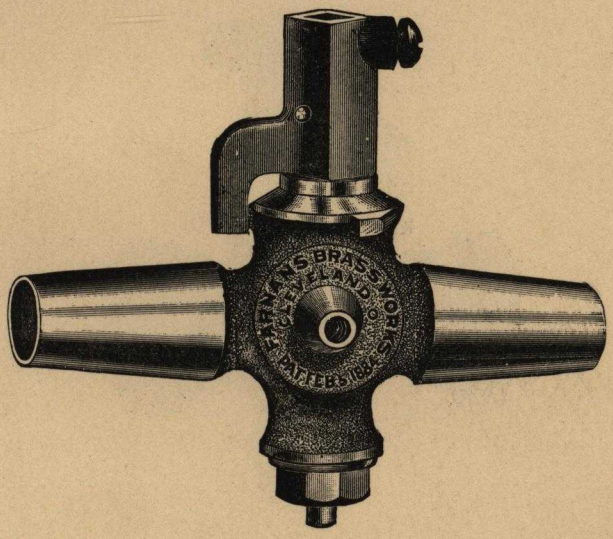


Plate 219.

	½	⅝	¾	1 in.
Price, for Lead Pipe S. & W., Flat Way	$13.00	$16.00	$20.50	$30.00
" for Lead Pipe S. & W., Round Way	18.00	21.00	26.50	46.00

Farnan Patent Stop and Waste Cocks.

LEVER HANDLE FOR IRON PIPE.

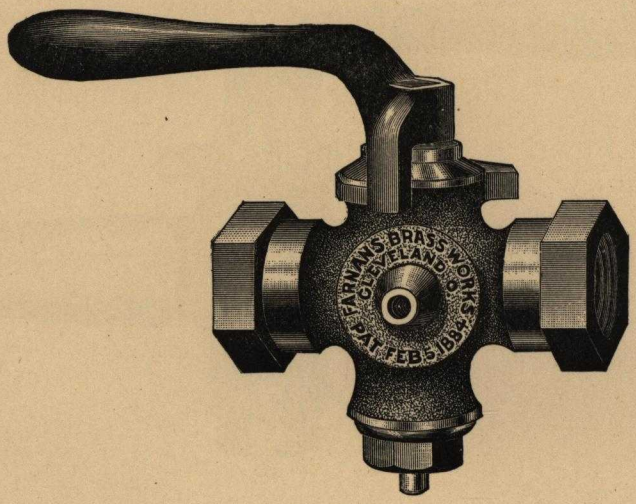


Plate 220.

	½	⅝	¾	1 in.
Price, for Iron Pipe S. & W., Flat Way	$14.00	$18.00	$22.50	$33.00
" for Iron Pipe S. & W., Round Way	19.00	23.00	28.50	49.00

CLAMP OR TEE HANDLE FOR IRON PIPE.

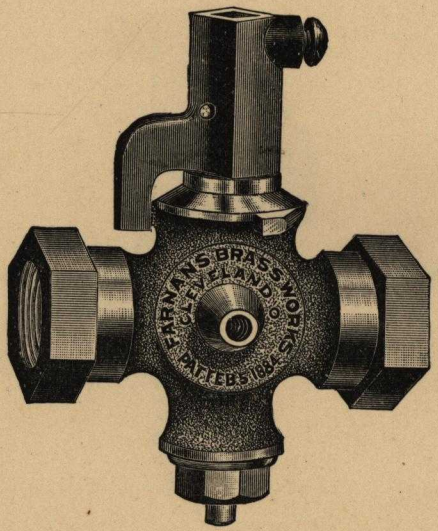


Plate 221.

	½	⅝	¾	1 in.
Price, for Iron Pipe S. & W., Flat Way	$14.00	$18.00	$22.50	$33.00
" for Iron Pipe S. & W., Round Way	19.00	23.00	28.50	49.00

Lead Traps.

LOWE'S PATENT.

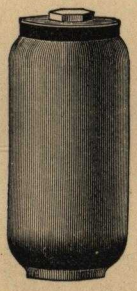
	4 No. 1.	4 No. 2.	2	1½	1¼ in.
Full S	$1.80	$1.60	$ .90	$ .66	$ .58
¾ S	1.80	1.60	.90	.66	.58
½ S	1.40	1.30	.80	.58	.50
Running	—	—	.85	.60	.53
Long Bends	1.12	—	.40	.35	—
Short Bends	.73	—	—	—	—

DUBOIS & RAYMOND.

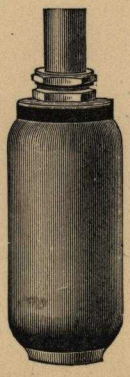
	4 No. 1.	3	2	1½	1¼ in.
Full S	$2.20	$1.70	$1.10	$ .80	$ .65
¾ S	2.20	1.70	1.10	.80	.65
½ S	1.70	1.35	1.00	.70	.55
Running	1.85	1.50	1.05	.75	.60
Running Y	2.20	1.70	1.10	.80	.65
Bag	4.60	3.40	2.00	1.60	1.25
Long Bend	1.35	1.00	.55	.45	.40
Short Bend	.90	.75	.45	.40	.30

ROUND TRAP.

No. 1.



No. 2.



No. 3.

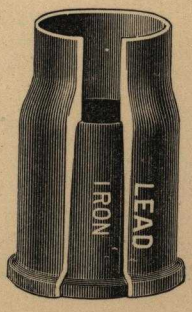
Prices on application.

RAYMOND LEAD FERRULES.

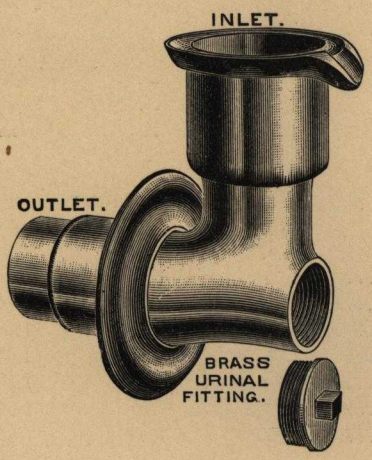
These Ferrules will save you time, labor, and money, and make the most thorough and durable joint that can be made between lead and iron soil pipe.

NO GALVANIC ACTION.

	4 in. long.	6 in. long.	8 in. long.	10 in. long.	12 in. long.
1½ × 2 in.	$ .23	$ .35	$ .45	$ .50	$ .55
2 in.	.18	.30	.40	.45	.50
3 in.	.25	.40	.55	.70	.75
4 in.	.35	.55	.70	.85	.90

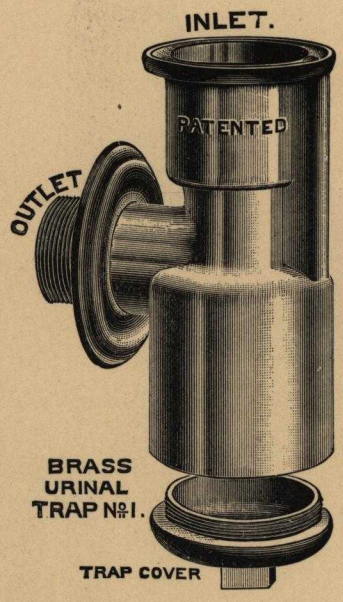


Barrett's Urinal Fittings.



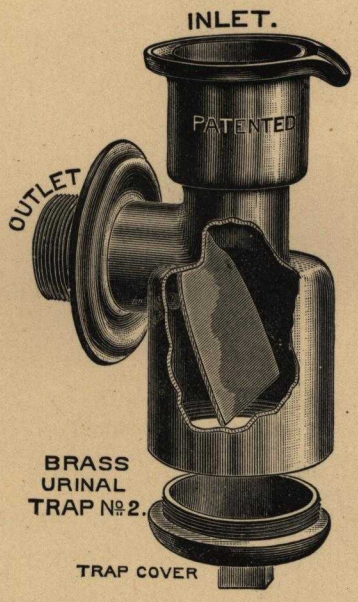
Brass, Dipped	$3.00
" Polished	3.50
" Nickel-Plated	3.75

URINAL TRAP, No. 1.



Brass, Dipped	$3.50
" Polished	4.00
" Nickel-Plated	4.50
Bent Couplings, with Vent, extra, net	.50

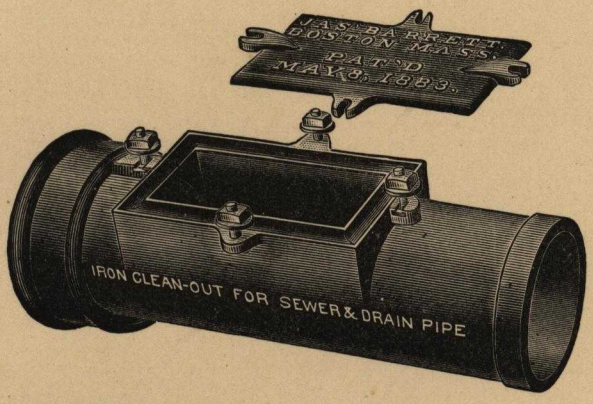
URINAL TRAP, No. 2.



Brass, Dipped	$3.50
" Polished	3.75
" Nickel-Plated	4.00
Bent Couplings, with Vent, extra, net	.50

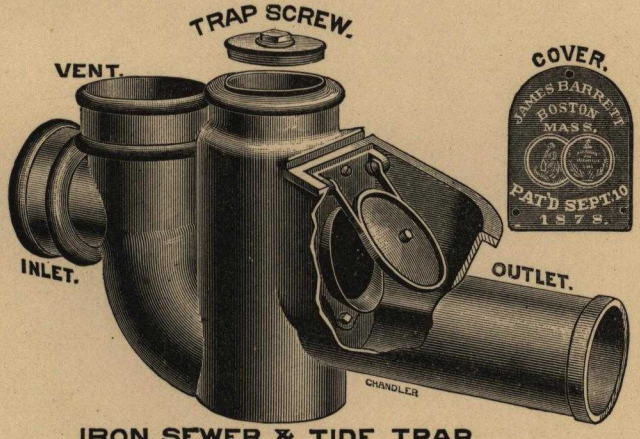
Barrett's Cleanouts and Traps.

IRON CLEANOUTS.



Size.	Light.	Heavy.
2 inches, each	$1.00	$1.50
3 " "	1.35	2.50
4 " "	1.75	3.50
5 " "	2.75	5.00
6 " "	3.75	6.00
8 " "	—	10.00
10 " "	—	15.00

IRON TRAP.



IRON SEWER & TIDE TRAP.

Size.	
4 inches	$11.00
5 "	14.00
6 "	15.00
8 "	50.00
10 "	75.00

	"STANDARD" CAST IRON SOIL PIPE AND FITTINGS.						"EXTRA HEAVY" SOIL PIPE AND FITTINGS.					
	2 inch Diameter.	3 inch Diameter.	4 inch Diameter.	5 inch Diameter.	6 inch Diameter.	8 inch Diameter.	2 inch Diameter.	3 inch Diameter.	4 inch Diameter.	5 inch Diameter.	6 inch Diameter.	8 inch Diameter.
Cast Iron Soil Pipe, per foot	$0.24	$0.30	$0.36	$0.50	$0.60	$1.25	$0.35	$0.55	$0.75	$1.00	$1.20	$2.25
Double Hub Pipe, per length	1.50	1.80	2.10	2.80	3.30	8.50	2.05	3.05	4.05	5.30	6.30	15.00
Quarter Bends	0.40	0.55	0.65	1.00	1.20	3.00	0.50	0.70	1.10	1.35	1.75	4.00
" " with 2 in. Connection, Side or Heel	0.70	0.85	0.95	1.30	1.50	—	0.80	1.00	1.40	1.65	2.05	—
" " " 3 in. " " "	0.80	0.95	1.05	1.40	1.60	—	—	—	1.50	1.75	2.15	—
Double Hub Quarter Bends	0.70	0.85	0.95	1.30	1.50	—	0.80	1.00	1.40	1.65	2.05	—
" " Eighth "	0.65	0.75	0.90	1.20	—	—	0.75	0.95	1.30	1.60	—	—
Fifth Bends	0.40	0.55	0.65	1.00	1.20	—	0.50	0.70	1.10	1.35	1.75	—
Sixth Bends	0.40	0.55	0.65	1.00	1.20	3.00	0.50	0.70	1.10	1.35	1.75	4.00
Eighth Bends / Sixteenth Bends	0.35	0.45	0.65	0.90	1.05	2.75	0.45	0.65	1.00	1.20	1.40	3.75
Return Bends	0.65	0.85	1.25	2.00	3.00	—	0.75	1.10	1.75	2.75	4.00	—
Long Bends, 18 inches in clear	0.80	—	1.50	2.25	2.50	5.50	—	—	2.25	3.00	3.50	—
T Branches	0.40	0.55	0.75	1.20	1.40	3.25	0.60	0.80	1.20	1.50	2.00	5.50
T–**Y** Branches	0.60	0.80	1.20	1.60	2.00	5.00	0.80	1.25	1.60	2.25	3.25	8.00
Double **T**–**Y** Branches	1.00	1.25	1.65	2.25	3.00	6.00	1.25	1.60	2.00	3.00	4.00	9.00
T, **Y**, and **T**–**Y** Branches with side Inlet, made up to 6 in., add 50 c. to List Price.												
Long **T** Branches, 24 inches in clear	—	—	2.00	2.75	3.50	—	—	—	3.00	4.00	5.00	—
Cross Head Branches	0.80	1.10	1.25	1.60	2.50	5.00	1.00	1.40	1.75	2.10	3.30	7.00
Half **Y** Branches	0.60	0.80	1.20	1.60	2.00	5.00	0.80	1.25	1.60	2.25	3.25	8.00
Double Half **Y** Branches	1.00	1.25	1.65	2.25	3.00	6.00	1.25	1.60	2.00	3.00	4.00	9.00
Long **Y** Branches, 4 × 4, 24 inches in clear	—	—	2.50	—	—	—	—	—	3.50	—	—	—
Y Branches	0.60	0.80	1.20	1.60	2.00	5.00	0.80	1.25	1.60	2.25	3.25	8.00
Angle **Y** Branch	—	—	3.50	4.50	5.50	—	—	—	4.50	5.75	7.50	—
Double **Y** Branches	1.00	1.25	1.65	2.25	3.00	6.00	1.25	1.60	2.00	3.00	4.00	9.00
Ventilating Branch	0.80	1.25	1.50	2.00	3.00	6.00	1.25	1.75	2.00	2.75	4.00	8.50
Offsets, to offset 2 inches	0.40	—	0.80	—	—	—	0.60	—	1.20	—	—	—
" " 4 "	0.50	0.75	0.85	1.40	2.00	—	0.90	1.10	1.25	1.80	3.00	—
" " 6 "	0.60	0.80	1.00	1.60	2.25	—	1.00	1.20	1.40	2.00	3.25	—
" " 8 "	0.70	0.90	1.15	1.80	2.40	—	1.10	1.35	1.50	2.25	3.50	—
" " 10 "	0.80	0.95	1.25	1.90	2.60	—	1.20	1.40	1.60	2.40	3.75	—
" " 12 "	0.85	1.00	1.40	2.00	2.75	—	1.25	1.45	1.80	2.50	4.00	—
" " 14 "	1.00	1.25	1.65	2.20	—	—	1.45	1.70	2.00	2.75	—	—
" " 16 "	1.15	1.40	1.80	2.40	—	—	1.60	1.90	2.25	3.00	—	—
" " 18 "	1.25	1.50	2.15	—	—	—	1.75	2.00	2.80	—	—	—
" " 20 "	—	—	2.25	3.00	—	—	—	—	3.00	3.75	—	—
" with 2 in. inlet for Connection, 50 c. extra.												
Double Hubs	0.30	0.45	0.65	0.75	0.80	2.50	0.40	0.55	0.75	0.90	1.15	3.50
Single Hubs	0.25	0.35	0.40	0.60	0.75	2.50	0.35	0.40	0.50	0.75	1.00	3.00
Reducers	—	0.45	0.50	0.70	0.80	2.50	—	—	0.60	0.80	0.90	2.20
Straight Sleeves	0.30	0.45	0.65	0.75	0.80	1.50	0.40	0.55	0.75	0.90	1.15	3.50
Thimbles with Covers	—	—	0.60	0.70	0.90	2.25	—	—	—	—	—	—
T Saddle Hubs	0.30	0.50	0.60	0.75	1.10	1.50	0.40	0.65	0.80	1.00	1.40	2.25
Pipe Plug	0.15	0.25	0.30	0.35	0.50	1.20	0.25	0.35	0.40	0.50	0.65	1.50
Bands	0.45	0.55	0.70	1.00	1.40	2.25	0.90	1.00	1.50	2.00	2.75	4.00
" with Outlets	0.75	0.90	1.10	1.45	1.90	3.00	1.50	1.75	2.00	2.75	3.50	5.00
Y and Half **Y** Saddle Hubs	0.35	0.55	0.70	0.90	1.25	2.00	0.45	0.70	0.90	1.15	1.55	3.00
S, Half **S**, and Three-quarter **S** Traps	0.80	1.25	1.75	3.00	4.00	—	1.25	2.00	2.75	4.00	5.50	—
Ventilating Caps (Spigot end)	0.40	0.60	0.80	1.10	1.50	—	—	—	—	—	—	—
" " (Hub end)	0.70	0.90	1.10	1.40	1.80	—	—	—	—	—	—	—
Trap Covers	0.12	0.16	0.20	0.30	0.40	—	—	—	—	—	—	—
Increasers, to increase to 3 inch	0.70	—	—	—	—	—	1.00	—	—	—	—	—
" " " 4 "	0.75	1.00	—	—	—	—	1.10	1.50	—	—	—	—
" " " 5 "	0.80	1.10	1.20	—	—	—	1.15	1.60	1.70	—	—	—
" " " 6 "	0.85	1.20	1.25	1.35	—	—	1.30	1.70	1.75	1.95	—	—
" " " 7 "	—	—	1.50	1.60	1.75	—	—	—	2.00	2.25	2.50	—
" " " 8 "	—	—	1.70	1.80	2.00	—	—	—	2.30	2.60	2.75	—
Bath **Y**, 4 × 4 × 2	—	—	2.50	—	—	—	—	—	3.50	—	—	—
Running Traps, with or without Hand Holes	0.80	1.25	1.75	3.00	4.00	9.00	1.25	1.75	2.75	4.00	5.50	12.00
" " with Hub for Vent	0.80	1.25	1.75	3.00	4.00	9.00	1.25	1.75	2.75	4.00	5.50	12.00
" " with Double Vent	—	—	2.75	4.00	5.00	11.00	—	—	3.75	5.00	6.50	14.00
Y Branch, Running Trap	—	—	3.00	4.50	5.00	—	—	—	4.00	5.50	7.00	—
Traps with Vent, or with Inlet in Heel or Side, 50 c. extra.												

NOTE. — All Pipe from 2 inch to 6 inch inclusive, made in lengths of 5 feet.
" " 8 " 12 " " " " 6 "
All Pipe and Fittings are furnished Tar-coated, unless ordered plain.

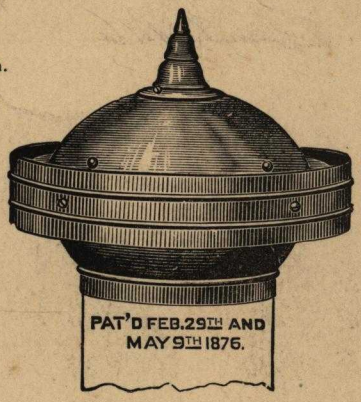
AVERAGE WEIGHT OF EXTRA HEAVY PIPE PER FOOT.

2 inch, 5½ lbs. 3 inch, 9½ lbs. 4 inch, 13 lbs. 5 inch, 17 lbs. 6 inch, 20 lbs. 8 inch, 33½ lbs.
10 inch, 45 lbs. 12 inch, 54 lbs.

Globe Ventilator and Chimney Cap.

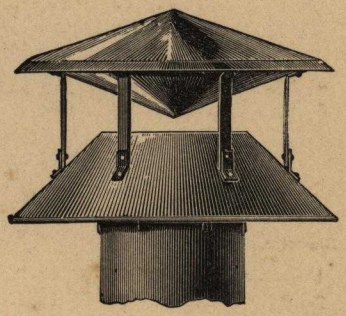
GALVANIZED IRON.

	Price, each.		Price, each.
2 in.	$1.00	10 in.	$5.75
2½ "	1.00	12 "	6.75
2¾ "	1.00	14 "	13.00
3 "	1.50	16 "	20 00
3½ "	1.50	18 "	27.00
4 "	1.75	20 "	33.00
4½ "	2.00	24 "	40.00
5 "	2.50	30 "	65.00
5½ "	2.85	36 "	120.00
6 "	3.40	40 "	180.00
7 "	4.00	48 "	240.00
8 "	4.65	60 "	360.00



Van Noorden's Patent Ventilator and Chimney Top.

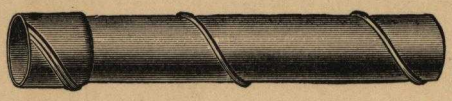
2 in.	$1.00	16 in.	$20.00
3 "	1.25	18 "	25.00
4 "	1.65	20 "	30.00
5 "	2.25	22 "	35.00
6 "	3.25	24 "	40.00
7 "	4.00	28 "	52.00
8 "	4.50	30 "	60.00
10 "	6.50	36 "	84.00
12 "	8.50	40 "	110.00
14 "	14.00	42 "	125.00
		48 "	180.00



Galvanized Wire Conductor Strainers.

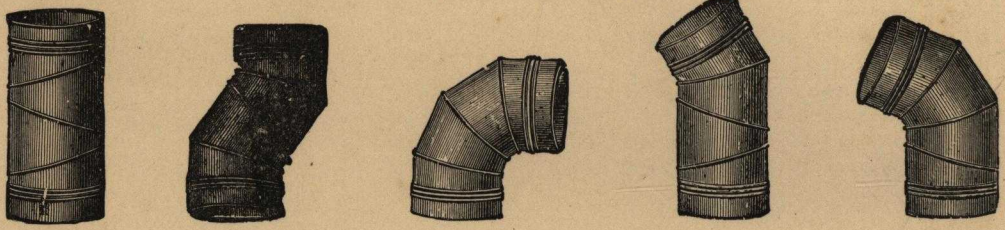
	Per doz.
2 in.	$2.50
3 "	3.00
4 "	3.50
5 "	4.00
6 "	4.50
8 "	10.50

Ritchie's Patent Spiral Lock-Seam Pipe.



Diameter.	Galvanized. Per foot.	Tin. Per foot.
1½ in.	12 cents.	7 cents.
2 "	14 "	9 "
2½ "	17 "	10 "
3 "	19 "	11 "
4 "	25 "	15 "
5 "	30 "	21 "
5½ "	34 "	25 "
6 "	38 "	28 "

Galvanized Fittings.



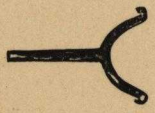
Diameter.	Adjustable Elbows.	¼ and ⅛ Bends.	Lobster Back Elbows.	Couplers.	T's and Y's.	Conductor Caps.
1½ in.	$ .20	$ .18	$ .20	$ .18	$ .25	$ .11
2 "	.20	.18	.20	.18	.30	.11
2½ "	.25	.22	.25	.22	.40	.13
3 "	.30	.24	.30	.24	.45	.15
4 "	.40	.36	.40	.36	.60	.20
5 "	.55	.50	.55	.50	.78	.26
5½ "	.65	.56	.65	.56	.88	.29
6 "	.70	.64	.70	.64	.96	.32

Tin Fittings.

Diameter.	Adjustable Elbows.	¼ and ⅛ Bends.	Lobster Back Elbows.	Couplers.	T's and Y's.	Conductor Caps.
1½ in.	$ .15	$ .12	$ .15	$ .12	$ .15	$ .10
2 "	.15	.12	.15	.12	.20	.10
2½ "	.20	.16	.20	.16	.25	.13
3 "	.20	.18	.20	.18	.30	.15
4 "	.30	.24	.30	.24	.45	.20
5 "	.40	.36	.40	.36	.60	.25
5½ "	.55	.50	.55	.50	.70	.28
6 "	.55	.50	.55	.50	.78	.30

GALVANIZED HOOKS

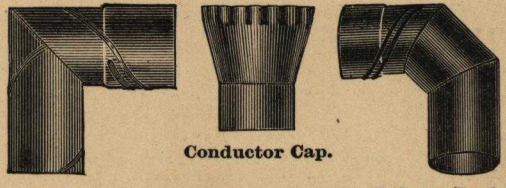
Of Best Malleable Iron.



PRICE, PER DOZEN.

Size.	
2 inch	$ .72
3 "	.84
4 "	1.08

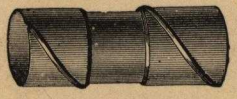
FITTINGS.



Bend.

Conductor Cap.

Lobster Back Elbow.



Coupler.

Ritchie's Corrugated Expanding Conductor,

WHICH IS PREFERRED BECAUSE

It has no Soldered Joints.

The Coupling is made by enlarging, not reducing the pipe.

The Galvanizing is unequalled.

GALVANIZED EXPANDING CONDUCTOR.

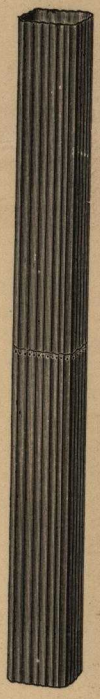
Round Pipe.

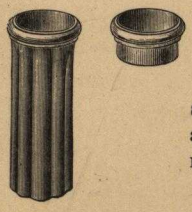
2 inch	12	cents per foot.
3 "	15	" "
4 "	20	" "
5 "	25	" "
6 "	30	" "

Square Pipe.

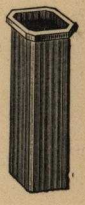
$1\frac{3}{4} \times 2\frac{1}{4}$ inches	12	cents per foot.
$2\frac{3}{8} \times 3\frac{1}{4}$ "	15	" "
$2\frac{3}{4} \times 4\frac{1}{4}$ "	20	" "
$3\frac{3}{4} \times 5$ "	25	" "

Prices quoted on application for pipe made of other sheet metals.





Ritchie's Conductor Head.



The cuts show this Conductor Head, first alone, then slipped into the top of a Corrugated Conductor. It makes a cheap, attractive, and convenient finish, no solder being needed.

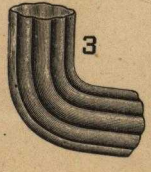
Price of each size, same as a foot of Corrugated Pipe.

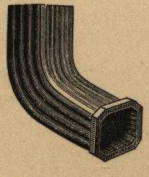
Ritchie's Patent Stamped Corrugated Elbows and Shoes.

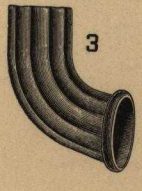
In these goods the trade find, for the first time, satisfactory expanding Elbows and Shoes, perfect in curve, and free from unreliable and unsightly soldered joints.

ROUND OR SQUARE. GALVANIZED.

	No. 1. Per dozen.	No. 2. Per dozen.	No. 3. Per dozen.
2 inch	$2.50	$3.00	$3.50
3 "	2.75	3.25	3.75
4 "	3.50	4.00	4.50
5 "	4.25	4.75	5.25
6 "	4.70	5.25	5.75

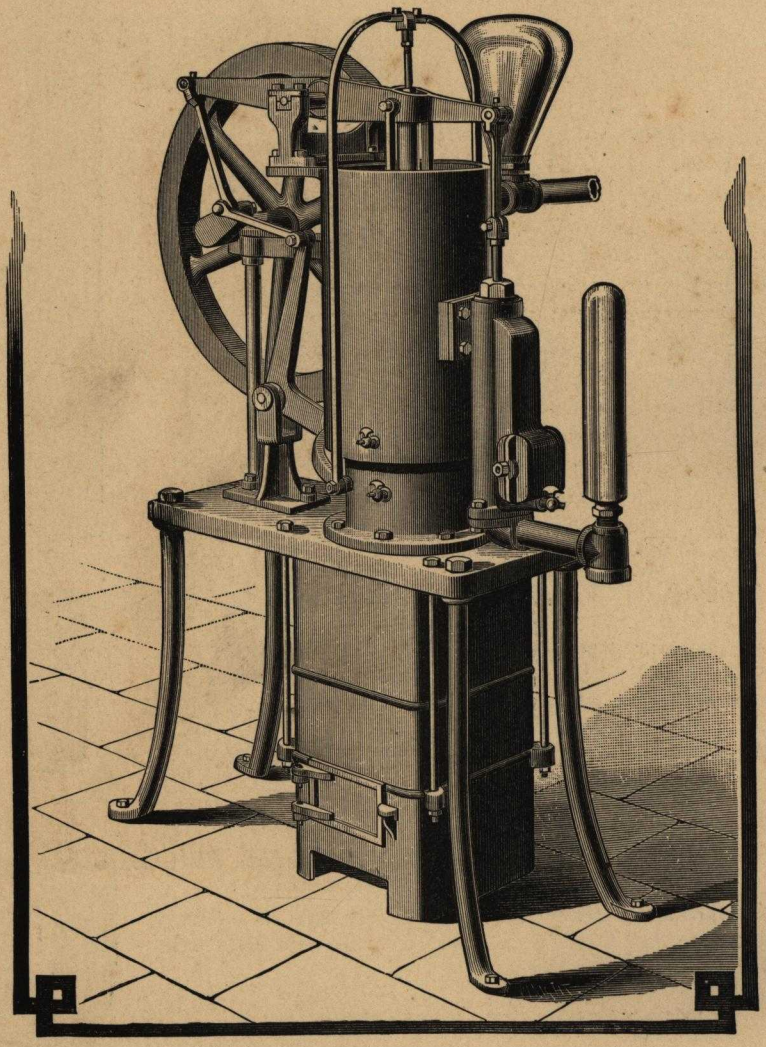






Ericsson's New Hot Air Pumping Engine.

MADE ON THE INTERCHANGEABLE PLAN TO THE MOST APPROVED SYSTEM OF STANDARD STEEL GAUGES.



Ericsson's Caloric Pumping Engine is specially intended for domestic use in lifting and forcing water from wells and cisterns, or from city mains, to tanks on upper floors of buildings in city or country.

Over 5,000 in Use.

This Pumping Engine is entirely safe, no steam being employed, and is not liable to derangement. Can be operated and attended to by any one.

The following sizes will pump the number of gallons specified to a height of 50 feet, but they will pump more water to a lesser height, or less water to a greater height.

Price, for 5-inch cylinder, pumping 150 gallons per hour 50 feet. Specially intended for pumping out of water-works pipes for single dwellings:
With gas furnace $150.00

Price, for 6-inch cylinder, pumping 200 gallons per hour 50 feet:
With gas furnace ..... $200.00 With coal or wood furnace..... 210.00

Price, for 8-inch cylinder, pumping 350 gallons per hour 50 feet:
With gas furnace ..... $235.00 With coal or wood furnace..... 250.00

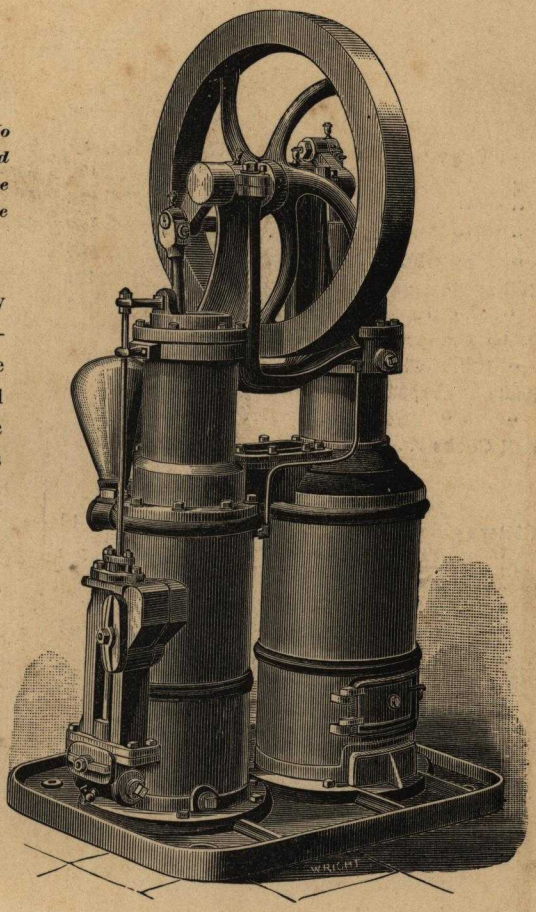
Price, for 10-inch cylinder, pumping 800 gallons per hour:
With wood or coal furnace 300.00

Price, for 12-inch cylinder, pumping 1,000 gallons per hour 50 feet:
With coal or wood furnace only 320.00

Price, for duplex 12-inch cylinders, pumping 1,600 gallons 50 feet:
With coal or wood furnace only 450.00

The above prices include engine, pump, copper air-chamber, vacuum chamber, furnace, oil-can, and wrench. Everything furnished except suction and discharge pipes. No charge for boxing or cartage. Furnaces for gasoline gas. We furnish with every machine printed directions how to set and operate. *Send for Special Catalogue.*

The Improved Rider Compression Hot Air Pumping Engine.



Absolutely safe. No steam. Valveless. No exhaust. Most economical power in the world for tank pumping. Still-running. Can be operated by any one. Durable, and not liable to derangement.

They are adapted to pumping for country seats, railroad tank stations, hotels, greenhouses, barns, irrigation of lawns, orange groves and gardens, sprinkling streets and race tracks, farms, army posts, hydraulic elevators, fish hatching, bottling, business blocks, public buildings, school-houses, village water-works, etc., etc.

Over 6,000 in Use.

The following sizes will pump the number of gallons specified to a height of 50 feet, but they will pump more water to a lesser height, or less water to a greater height.

Size of Cylinders, inches.	Floor Space.	Height to Top of Fly-Wheel.	Revolutions, per minute.	Weight, pounds.	Gallons, per hour, 50 feet high.	Price, with Rolling Valve Pump attached to Cooler of Engine.
4	1 ft. 6 in. × 2 ft. 2 in.	3 ft. 9 in.	120 to 200	490	200	$200.00
4¼	1 ft. 6 in. × 2 ft. 2 in.	3 ft. 9 in.	120 to 200	520	250	225.90
5	2 ft. 2 in. × 2 ft. 10 in.	4 ft. 10 in.	100 to 160	1,050	350	300.00
6	2 ft. 5 in. × 3 ft. 4 in.	5 ft. 11 in.	80 to 120	1,800	1,000	400.00
8	2 ft. 5 in. × 3 ft. 11 in.	6 ft. 11 in.	80 to 120	2,700	2,000	550.00
10	2 ft. 8 in. × 4 ft. 4 in.	7 ft. 9 in.	80 to 110	3,600	3,000	700.00

Can be fitted with Deep Well Pumps.

The prices named above include engine, furnace, copper air and vacuum chambers; printed directions in book form how to set and operate; wrench, shovel, and poker; oil and oil-can; everything complete, ready for suction and discharge pipes. By carefully following the printed directions, any man of ordinary intelligence can set the engine. *Send for Special Catalogue.*

CONTENTS.

B

	PAGE
Bath Tubs, with Boston Patent Waste	152–155
" " Somerset	156
" " Common	168
" " Sitz	169
" " Foot	169
Boilers, Copper	170, 171
" Galvanized Iron	171
Bibbs, Compression	178–182
" Self-Closing	185, 186
Basin Cocks, Compression	183, 184
" " Self-Closing	186
Ball Cocks	187, 188

C

Cisterns, Sure Supply	14–16
" Waste-Preventing	17–19
" Fore and After Wash	20–22
" After Wash	23–25
" with I. S. Valves	28–31
" with Common Valve	31, 32
" Cabinet Finish	33
" Flushing for Urinals and Hoppers	164–166
Cleanouts, Barrett Patent	193
Conductor Strainers	195

D

Door Fixtures	8–11

F

Flush Pipes	40
Floor Flanges	41

H

Hoppers and Traps, combined. The Clarendon and Dartmouth Apparatus, complete	81–89
Hoppers, Short, Oval, and Square Apparatus, complete	90–109
" Tall Oval Apparatus, complete	110–113
" Enamelled Apparatus, complete	114–117
" Earthen Slop	118
" combined with Traps	124
" Tall Earthen	125, 126
" Short, Oval and Square, Earthen, with Traps	127–133
" Enamelled Iron	134–137
Hopper Traps	138, 139

L

	PAGE
Legs for Closet Seats	39
Lead Bends for Boston Hopper	140
Lavatories, Boston Patent	141–148
Lavatory Legs and Brackets	149

P

Pantry Sinks, Somerset	156
" " Common Copper	169
" " Earthenware	173
Pipe, Iron Soil	194
" Spiral Vent	196
" Corrugated Conductor	197
Pumping Engines	198, 199

R

Raymond Thimbles	191

S

Slop Safes	167
Stop and Waste Cocks	189, 190

T

Traps, Brass Somerset	150, 151
" Lead	191
" Sewer, Barrett Patent	193

U

Urinals, Boston Siphon	157–162
" Earthen	175, 177
Urinal Fittings	163, 192

V

Valves, Improved Float	5
" " Swinging	26, 27
Ventilators	195

W

Water Closets, Boston Siphon	43–56
" " Boston Hopper	57–63
" " Vendome, Ideal, Somerset, Lenox, Beau Ideal Washout Apparatus, complete	66–79
Washout Water Closets only	119–123
Wash Basins	172, 173
Water-Closet Basins	174
" " Seats	34–38

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